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# THE LARYNGOSCOPE.

VOL. VI. ST. LOUIS, MO., JANUARY, 1899. No. 1.

## ORIGINAL COMMUNICATIONS.

(Original communications are received with the understanding  
that they are contributed exclusively to THE LARYNGOSCOPE.)

### THE PROGRESS OF RHINO-LARYNGOLOGY.

BY W. SCHEPPEGRELL, A.M., M.D., NEW ORLEANS, LA.

A review of the literature of the past year fails to reveal any decided innovation in the department of rhino-laryngology. There has been no diminution in the number of earnest workers, and investigations in the various branches have been faithfully continued, all the work, however, being practically in the same lines as during the previous year. This rest has enabled us to weigh the information already obtained and thus procure a more definite understanding of some of the unsettled theories of pathologic conditions and therapeutic measures.

In regard to the character of the normal nasal secretion, some experiments have been carried on during the past year, without, however, arriving at any definite conclusion. From a careful bacteriologic study of this subject, Park and Wright<sup>1</sup> maintain that for bacteria which have developed in the blood or secretions of other individuals, the bactericidal power of the nasal mucus is little or nothing and cannot be depended upon to prevent infection from virulent bacteria. This view is supported by certain clinical experience and teaches the importance of care with instruments used in the nasal cavities.

Attention has been called to a form of external rhinitis due to the

Klebs-Löffler bacillus in children convalescent from scarlet fever by C. Todd,<sup>2</sup> the term external rhinitis being applied to what is generally known as "vestibular" or "anterior" rhinitis. Although not membranous, this rhinitis is associated with the presence of the Klebs-Löffler bacillus in the nostril, this microorganism being absent in the fauces. It is contagious as vestibular rhinitis, but has not been observed to give rise to faucial or laryngeal diphtheria. It is not accompanied by rise of temperature, albuminuria or marked glandular enlargement as in other forms of diphtheria.

Another remedy for acute coryza has been suggested by D' Aquitol,<sup>3</sup> who recommends the application of leeches to the lower portion of the nasal septum. The possibility of sepsis in this application should, however, not be overlooked, this complication being demonstrated by the report of Lenzman,<sup>4</sup> in which general sepsis followed a furuncle at the entrance of the nostril in a strong woman of thirty-six years, which proved fatal in five days. Staphylococci were found in the exudated fluid, but there was no pus.

The advocates for the operation of turbinectomy appear to have suffered a reaction during the past year, and comparatively little has been published on this subject. The operation deserves a well-earned rest. Greville Macdonald<sup>5</sup> has published some further investigations on the importance of the turbinated bodies in the respiratory tract and calls attention to the embarrassment of this process after turbinectomy.

In addition to the usual number of reports of foreign bodies in the nasal cavities, several additional cases of the Texas screw-worm<sup>6, 7</sup> have been published, one case described by C. M. Robertson<sup>8</sup> being followed by a fatal result. Cases of occlusion of the choanæ are reported by J. P. Clark<sup>9</sup> and Gradenigo,<sup>10</sup> the former describing a complete congenital occlusion, and the latter an occlusion of the right choana.

There has been considerable literature on the subject of the correction of deformed nasal septa, without, however, adding much to our former stock of information. The advantages of a submucous operation has again been brought forward by DeBlois,<sup>11</sup> who claims that it obviates the danger of making a perforation, heals more quickly than the ordinary operation, and is not followed by cicatricial tissue, which forms a lodging place for crusts of dry mucus. Quite a simple method for resecting the nasal septum without perforation is recommended by Escat.<sup>12</sup> It consists of injecting four minims of boiling water by means of an hypodermic syringe into the mucous membrane of the concave side, thus stripping this from the cartilage. The

convex side is then resected with a bistoury in a vertical direction. After cicatrization, the closure is insured by the approximation of the uninjured mucous membrane to the cicatricial membrane.

Gelatine, which has recently come into favor as a hemostatic in general medicine and surgery, has been recommended in epistaxis by Carnot,<sup>13</sup> who advises it especially in bleeders; he also advocates its use after tonsillotomy. It is applied by means of a syringe or piece of wool saturated with a 5 to 10 per cent gelatine solution in sterilized water. The addition of an antiseptic has been found not to interfere with the coagulative property of the solution.

Formaldehyde has been added to the list of therapeutic agents in ozena by G. L. Richards,<sup>14</sup> who uses five to ten drops of a 40 per cent solution in eight ounces of hot water. The electrolytic treatment of this disease continues to be recommended by Réthi<sup>15</sup> and Scheppegrell<sup>14</sup>. The subject of the treatment of ozena by antidiphtheritic serum has been again brought to the attention of the profession by Holger Mygind,<sup>16</sup> who claims that the injection of antidiphtheritic serum in genuine cases of ozena is the most effective of all treatments hitherto known. He afterward, however, makes a somewhat contradictory statement when he says that the presence of toxins is of no importance, but that it is the serum alone which acts, as he has obtained equally good results from the injection of patients with the normal serum of horses.

The observation of Gouguenheim's cases at the Lariboisière Hospital<sup>17</sup> indicated that some good results may be obtained from the use of the serum therapy in ozena, and shows that any drawback of a serious character may be avoided by using small doses. The author admits, however, that while this is the most convenient method for combating the fetor, hopes of a definite cure should not be held out to the patient.

Regarding the etiology of inflammation of the accessory sinuses of the nose, Howard and Ingersoll<sup>18</sup> have made a careful bacteriologic study, and have demonstrated that, with a few exceptions (*aspergilli* and *vermes*), inflammation of these cavities are caused by micro-organisms, the *diplococcus lanceolatus*, the pyogenic staphylococci and streptococci, the bacilli of the group of Friedländer's bacillus, the bacillus diphtheriæ and the bacillus influenzae being the most important. The bacillus of tuberculosis has also been observed, which shows the importance of making a bacteriologic examination. It is, however, not necessarily pathognomonic of a serious condition, as indicated by a case reported by Gaudier,<sup>19</sup> which was successfully

treated by opening through the canine fossa, curetting and packing with iodoform gauze.

The influence of plugging the nasal fossæ in the etiology of inflammation of the maxillary antrum is shown by St. Hilaire,<sup>20</sup> who reports two cases following this procedure. An interesting case is reported by Molinié,<sup>21</sup> in which the secretion was of a distinct bluish color and was supposed to be due to the development of a pyogenic colony in the frontal sinus of the right side.

In the treatment of empyema of the maxillary antrum, the operation of Luc has gained favor during the past year. Luc<sup>22</sup> admits, however, that he is not entitled to priority in this operation, as Scanes Spencer has already described such a procedure, in which the canine opening, however, is not closed at the end of the operation. Caldwell has described the same operation, but without giving details or cases.

In certain forms of head-ache, especially frontal, E. L. Vansant<sup>23</sup> has found the forcible syringing of the accessory nasal sinuses with a stream of hot dry air a useful remedy. In some instances, the air is medicated, or nitrous oxide is employed.

In the treatment of empyema of the frontal sinus, Bryan<sup>24</sup> has somewhat modified the rules described in his original operation. In cases of extensive caries, he admits the impossibility of procuring healing in less than from four to six weeks, and, therefore, advises drainage, for some time at least, through the external opening instead of at once closing the external wound, as in his original operation. The Ogston-Luc method seems still to hold favor in empyema of the frontal sinus. The Cusber-Czerny operation has been somewhat modified by Barth,<sup>25</sup> who splits the nasal bone and the nasal process of the frontal bone, and forms a wider communication between the nose and the frontal sinus by removing the ethmoidal cells. The wound is sutured after the thorough removal of the frontal sinus membrane, and gives a fairly good cosmetic result.

Attention has been called by E. J. Moure<sup>26</sup> to the not infrequent occurrence of acute and subacute inflammation of post-nasal adenoids in adults, a condition which has been observed in any age up to fifty-five. Delstanche<sup>27</sup> has made similar observations, and Janquet<sup>28</sup> has operated on a woman of forty-five years for a voluminous adenoid growth.

The subject of tuberculous infection in adenoid growths has been extensively discussed, but with very diverging results. Gourc<sup>29</sup> and Walsham<sup>30</sup> from an examination of a large number of cases were unable to find any evidence of tuberculosis, while Brindel<sup>31</sup> found

proof of latent tuberculosis in 12½ per cent, and Dieulafoy<sup>32</sup> in as high as 20 per cent of the cases examined. A conclusion regarding this matter must therefore be left for future demonstration.

A number of fatal issues from the removal of adenoid vegetations has been reported. In a case described by Preble,<sup>33</sup> a fatal secondary hemorrhage developed on the eighth day, and in one by Hinkie<sup>34</sup> the untoward result was due to the chloroform used for the anesthesia. The latter calls attention to the investigations of the Viennese pathologists who have demonstrated that sufferers from adenoids frequently belong to an abnormal constitutional type, which has been found peculiarly susceptible to chloroform narcosis, and that therefore chloroform in such cases is inadmissible.

The subject of the location of the voice center has been made more confusing during the past year by the report of Onodi,<sup>35</sup> who claims as the result of his investigations that it is quite impossible to localize even approximately the voice center in the human brain. He reports a case of perforation in which the child breathed and cried after the brain had been cut off from the medulla at the level of the anterior corpora quadrigemina, much in the same way as Onodi's experiment in the dog. This field certainly requires further investigation.

A case of tracheocele following a séance of suspension is reported by Sabrazes and Cabannes,<sup>36</sup> who claim that this is the only case of the kind on record. In explanation of the so-called laryngeal vertigo, McBride<sup>37</sup> advances the theory that the increased pressure on the walls of the alveoli interferes with the free circulation of the blood through the lungs, and consequently diminishes the amount of blood in the left side of the heart. In addition, the pressure upon the large intrathoracic vessels hinders the return of the venous blood.

The number of local anesthetics is being continually increased, without, however, offering any real advantage over those already in vogue. Orthoform, however, seems to be an exception, as good results from this anesthetic have been reported by Lichtwitz and Sabrazes<sup>38</sup> in laryngeal tuberculosis, the point of special importance being that it gave immunity from pain for from twenty-four to forty-eight hours after the application.

Two remarkable cases of urticaria<sup>39 40</sup> have been reported, the first involving the uvula, and the second, the larynx directly, both nearly causing asphyxia.

In tuberculous laryngitis, S. Solis-Cohen<sup>41</sup> recommends formic aldehyde used with friction like lactic acid, a weak solution being

first used, and this increased up to 10 per cent. A case of tuberculosis of the larynx in a child four and a half years old is reported by Plicque<sup>42</sup> which is of interest on account of the rare localization of tuberculosis in this region in children, Siébert<sup>43</sup> having been able to collate only twelve cases, two being in his own practice. Three cases of acute miliary tuberculosis of the pharynx are reported by Kicer.<sup>44</sup>

The subject of malignant tumors of the larynx has received considerable attention, the tendency on the whole being to greater conservatism. The endo-laryngeal operation has been successful in a number of cases.

Chiari<sup>45</sup> has shown that laryngeal cancer is capable of cure in many cases, and that therapeutic nihilism is here altogether out of place. As a permanent cure can only be expected when the disease is in its incipency, a radical operation should be made as soon as a diagnosis of cancer is established.

A case of laryngeal carcinoma cured by endo-laryngeal treatment is reported by Noltenius.<sup>46</sup> He does not, however, endorse Fränkel's statement that the operation is void of all danger. The operation reported by Juraz<sup>47</sup> is of interest not only on account of the recovery of the patient, but also from the fact that after the endo-laryngeal removal of the vocal cords, the cicatrices originated two membranes resembling vocal cords, which had the fault that they were united anteriorly, but still enabled the patient to speak in a loud hoarse voice. The possibility of auto-inoculation in cancer, described by Semon and Butlin,<sup>75</sup> was also demonstrated in this case, as the epithelioma developed on the right cord and produced by contact the same change in the symmetrical part of the left cord.

Several successful cases of laryngectomies for epithelioma have been reported. In the case described by Bell,<sup>48</sup> a low tracheotomy was first done and afterwards the entire larynx removed; in Depage's case,<sup>49</sup> the patient recovered and is able to speak in a whisper. In this operation, Garré<sup>50</sup> attaches much importance to the position of the patient; a horizontal position with the head inclined backwards allows the secretion to drain away from the trachea. By attention to this point, he claims that the mortality has fallen to 20 per cent. He also believes that a preliminary laryngotomy is often necessary for a correct and early diagnosis of carcinoma laryngis. Brindel<sup>51</sup> emphatically opposes this operation, and states that laryngectomy for malignant disease of the larynx should be entirely abandoned; thyrotomy should be substituted whenever there is still

time, and simple tracheotomy should be done when thyrotomy no longer offers any chance of success.

The value of erysipelous toxins in the treatment of sarcoma has been little advanced. In three cases reported by Baldwin,<sup>52</sup> one of sarcoma of the upper jaw, one of round-cell sarcoma of the nasopharynx, and one of sarcoma of the tonsil, none were benefited by the injection of this agent, and all ended fatally.

A great deal has been written during the past year on the subject of diphtheria with regard to the value of its antitoxin. The weight of opinion has by far been in favor of serum therapy, although strong opponents have not been wanting. The time of making a bacteriologic diagnosis has been shortened by the Koplik method,<sup>53</sup> in which it is claimed that a diagnosis may be made within two and a half or three hours, the method depending upon the principle of forcing the growth of the bacillus during the first two or three hours at the most favorable temperature, 38° C. A new diagnostic stain has been described by Hewlett,<sup>54</sup> who claims it to be a rapid means of making a positive diagnosis.

The serum treatment of diphtheria is condemned by Kassowitz,<sup>55</sup> who even refuses to consider the Klebs-Löffler bacillus the specific cause of diphtheria, which he says is still to be discovered. He claims that the lessened mortality in recent years in Vienna and Paris is due to the fact that the disease is of a milder type. Another case of death from an immunizing dose of antitoxin has been reported by Nifong,<sup>56</sup> an injection of between three and four cm. of antitoxin of a strength of 1,500 units being used. Two girls had been given similar injections from the same bottle, without any untoward result being observed. Ten minutes after the injection, the patient developed severe symptoms, and death followed in thirty-five minutes in spite of all efforts.

The report of the Committee of the Clinic Society of London<sup>57</sup> is in accord with that of the Committee of the Pediatric Society.<sup>58</sup> It shows that in cases of diphtheria treated with antitoxin not only was the mortality noticeably lessened, but the duration of life in fatal cases also prolonged. With the exception of rashes, joint pains and fever, no prejudicial action was observed in the series of cases investigated, even when large doses were employed. The report of Krönlein<sup>59</sup> shows that the reduction of mortality from the use of serum therapy is from 12 to 20 per cent to 6 per cent.

There has been no new development in the treatment of goitre. Electrical treatment continues to be advocated by a number of writers, and the thyroid gland has been found of value in parenchymatous



cases,<sup>60</sup> but useless in the cystic form. Further progress in the treatment of exophthalmic goitre with the suprarenal substance has been reported by S. Solis-Cohen,<sup>61</sup> who found sufficient improvement in the cases to justify a claim for the curative result of this method.

The treatment of tuberculosis by serum therapy has waned during the past year. While a few authors have favored it on scientific grounds,<sup>62</sup> still the majority have reported adversely as to its therapeutic value. At the last meeting of the staff of the Charité, Berlin's large public hospital,<sup>63</sup> this subject was discussed, and, on the whole, very little said in its favor. Recently, even in lupus and localized laryngeal and mucous lesions no success has been reported, although in some cases improvement has been claimed. As tuberculosis is usually local and does not produce immunity after infection, Sanders<sup>64</sup> claims that it is probably impossible to effect a cure by serum therapy. It is also condemned by Denison<sup>65</sup> and Waxham.<sup>66</sup>

The value of vaporized medicaments in these cases has been demonstrated by Thomas,<sup>67</sup> who proved the penetrability of vaporized medicaments into the air passages, a post-mortem examination having revealed stained oil globules within the finest bronchi and alveoli. By experiment it was also found that corpuscular bodies readily entered a diseased lung, so that vaporized remedies may penetrate diseased foci and cavities.

Among the various remedies advocated for pulmonary tuberculosis is ichthyol, Le Tanneur<sup>68</sup> having had good results from the internal administration of four-grain doses in capsules. Investigations have been recently made in incipient cases of pulmonary tuberculosis regarding the use of heated blood by Elestrom and Grafstrom,<sup>69</sup> who found a beneficial influence from this procedure. This treatment undoubtedly opens a wide field for experiment, but it needs to be more fully investigated before a decided opinion can be expressed regarding its permanent effects.

The subject of the X-rays in laryngology has been investigated by Scheier,<sup>70</sup> who found them of service in studying the physiology of the voice and speech, and in the physiology of deglutition. They have also been successfully used in the diagnosis of five cases of aneurism by A. Rosenberg,<sup>71</sup> two of retro-sternal goitre, three of retro-sternal tumor or mediastinal tumor, and two of carcinoma of the esophagus. Albers-Schönberg<sup>72</sup> claims to have used the X-rays successfully in a case of lupus.

The use of electricity in malignant tumors has received an interesting contribution in the investigations of Fabre-Domergue.<sup>73</sup> This author believes that orientation of the epithelial elements determines

the character of the tissue; with a centrifugal orientation, the elements develop with a continuous exfoliation of the horny layer and renewal of the *rete mucosum* without any tendency to break through the basement membrane, while centripetal orientation is abnormal and leads to partial or total infiltration of the tissues below the basement membrane. He believes that the property possessed by the electric current of turning certain unicellular organisms until their axes are parallel to the direction of the current may be used to restore the disorganized cells of epithelial cancers to their normal centrifugal orientation and arrest the growth of the neoplasm.

## BIBLIOGRAPHICAL REFERENCES.

- <sup>1</sup> W. H. Park and J. Wright, *Journ. Lar., Rhin. and Otol.*, London, March, 1898.
- <sup>2</sup> C. Todd, *Lancet*, May 28, 1898.
- <sup>3</sup> D'Aquiton, *Amer. Med. Surg. Bulletin*, Vol. XI, No. 12.
- <sup>4</sup> Lenzman, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>5</sup> Greville MacDonald, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>6</sup> W. Scheppegrell, *Laryngoscope*, Feb., 1898.
- <sup>7</sup> L. Dibble, *Annals of Otol., Rhinol. and Laryngol.*, Aug., 1898.
- <sup>8</sup> C. M. Robertson, *Laryngoscope*, March, 1898.
- <sup>9</sup> J. P. Clark, *Boston Med. and Surg. Journ.*, Feb. 24, 1898.
- <sup>10</sup> Gradenigo, *Ann. des Mal. de Lar., d'Or., du Nez et du Phar.*, March, 1898.
- <sup>11</sup> DeBlois, *N. Y. Med. Journ.*, Oct. 8, 1898.
- <sup>12</sup> Escat, *Gazette Hebd. de Méd. et de Chir.*, May 26, 1898.
- <sup>13</sup> Carnot, *Presse Méd.*, Sept. 18, 1898.
- <sup>14</sup> G. L. Richards, *Laryngoscope*, May, 1898.
- <sup>15</sup> Réthi, *Revue Int. de Rhin., etc.*, March, 1898.
- <sup>16</sup> Holger Mygind, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>17</sup> Lombard, *Ann. des Mal. de l'Or.*, April, 1898.
- <sup>18</sup> W. T. Howard and J. M. Ingersoll, *Amer. Journ. of Med. Sciences*, May, 1898.
- <sup>19</sup> Gaudier, *Journ. Lar. Rhin., and Otol.*, March, 1898.
- <sup>20</sup> St. Hilaire, *Proceed. Soc. Laryngol., Otol. et de Rhinol.*, Paris, April, 1898.
- <sup>21</sup> Molinié, *Méd. Bulletin*, Sept., 1898.
- <sup>22</sup> Luc, *Proceed. Société Française d'Otol., Laryngol. et de Rhinol.*, May, 1898.
- <sup>23</sup> E. L. Vansant, *Dunglison's C. and C. Record*, Vol. XIX, No. 6.
- <sup>24</sup> J. H. Bryan, *Journ. Amer. Med. Assn.*, April 9, 1898.
- <sup>25</sup> Barth, *Deutsche Med. Woch.*, April 28, 1898.
- <sup>26</sup> E. J. Moure, *Revue Hebd. de Laryng., etc.*, Jan. 29, 1898.
- <sup>27</sup> Delstanche, *Proceed. Soc. Belges d'Otol. et de Laryngol.*, 1898.
- <sup>28</sup> Janquet, *Proceed. Soc. Belges d'Otol. et de Laryngol.*, 1898.
- <sup>29</sup> Gourc, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>30</sup> Walsham, *Lancet*, June, 1898.
- <sup>31</sup> Brindel, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.

- <sup>322</sup> Dieulafoy, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>323</sup> W. Preble, *Aust. Med. Gazette*, May 19, 1898.
- <sup>324</sup> F. W. Hinkie, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>325</sup> A. Onodi, *Monats. f. Ohren.*, Jan., 1898.
- <sup>326</sup> Sabrazes and Cabannes, *Revue Hebdomadaire de Laryng.*, etc., Nov., 1898.
- <sup>327</sup> P. McBride, *Archiv. f. Laryngol. u. Rhinol.*, Bd. VII, Hft. 1.
- <sup>328</sup> Lichtwitz and Sabrazes, *Journ. Lar., Rhin. and Otol.*, London, March, 1898.
- <sup>329</sup> Guy Hinsdale, *Phil. Polyclinic*, Vol. VII, No. 31.
- <sup>330</sup> F. Woodbury, *Phil. Polyclinic*, Vol. VII, No. 27.
- <sup>331</sup> S. Solis-Cohen, *Amer. Med. Surg. Bull.*, Vol. XII, No. 26.
- <sup>332</sup> Plicque, *Ann. des Mal. de l'Or.*, etc., March, 1898.
- <sup>333</sup> Siégert, *Jahrbuch f. Kinder-Heilk.*, Vol. XLV.
- <sup>334</sup> G. Kicer, *Laryngoscope*, Feb., 1898.
- <sup>335</sup> O. Chiari, *Fränkel's Archiv.*, VIII, 1, 66.
- <sup>336</sup> Noltenius, *Fränkel's Archiv.*, VIII, 1, 128.
- <sup>337</sup> Juraz, *Journ. Lar., Rhin. and Otol.*, London, Oct., 1898.
- <sup>338</sup> J. Bell, *Montreal Med. Journ.*, May, 1898.
- <sup>339</sup> Depage, *Proceed. Soc. Belges de Chir.*, Jan., 1898.
- <sup>340</sup> Garré, *Münch. Med. Woch.*, May 3, 1898.
- <sup>341</sup> Brindel, *Revue Hebdomadaire de Laryng.*, etc., Oct. 29, 1898.
- <sup>342</sup> J. F. Baldwin, *Cin. Lancet-Clinic*, Jan. 1, 1898.
- <sup>343</sup> Koplik, *Id. Med. Journ.*, April, 1898.
- <sup>344</sup> R. T. Hewlett, *Journ. Lar., Rhin. and Otol.*, London, Sept., 1898.
- <sup>345</sup> Kassowitz, *Journ. Amer. Med. Assn.*, July 30, 1898.
- <sup>346</sup> Nifong, *Med. Review*, May, 1898.
- <sup>347</sup> Clin. Soc. London, *Phil. Med. Journ.*, June 18, 1898.
- <sup>348</sup> *Proceedings Pediatric Soc.*, 1897.
- <sup>349</sup> Krönlein, *Proceed. German Soc. of Surg.*, Berlin, April, 1898.
- <sup>350</sup> Morello, *Revista Veneta de Scienze Med.*, May 18, 1898.
- <sup>351</sup> S. Solis-Cohen, *Phil. Polyclinic*, Sept. 17, 1898.
- <sup>352</sup> Maragliano, *Presse Méd.*, Aug. 6, 1898.
- <sup>353</sup> Staff Report of the Charité, *Phil. Med. Journ.*, March, 1898.
- <sup>354</sup> Sanders, *Phil. Med. Journ.*, June 18, 1898.
- <sup>355</sup> C. Denison, *Journ. Amer. Med. Assn.*, Sept. 24, 1898.
- <sup>356</sup> F. E. Waxham, *Journ. Amer. Med. Assn.*, Oct. 15, 1898.
- <sup>357</sup> H. M. Thomas, *Journ. Amer. Med. Assn.*, May 28, 1898.
- <sup>358</sup> Le Tanneur, *Revue Méd.*, Jan. 5, 1898.
- <sup>359</sup> Elestrom and Grafstrom, *N. Y. Med. Journ.*, Aug. 27, 1898.
- <sup>360</sup> M. Scheier, *Archiv. Int. de Laryngol.*, etc., March, 1898.
- <sup>361</sup> A. Rosenberg, *Ann. of Rhin., Laryng. and Otol.*, Aug. 1898.
- <sup>362</sup> Albers-Schönberg, *Münch. Med. Woch.*, Feb. 15, 1898.
- <sup>363</sup> Fabre-Domergue, *Bull. de l'Acad. de Méd.*, June 28, 1898.
- <sup>364</sup> W. Scheppegrell, *Electricity in the Diagnosis and Treatment of Diseases of the Nose, Throat and Ear*, 1898.
- <sup>365</sup> Semon and Butlin, *Centralblatt f. Laryngologie*.

## THE PROGRESS OF OTOLOGY.

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The retrospect of aural therapeutics recalls visions of the "old-timed poultice" and delayed action. Antiseptic surgery has accomplished much for the energetic aurist and has proven a boon for his suffering patient. The study of otology has made rapid strides during the past few years. Its foundation has been laid by the persistent efforts of clinical research.

To-day we recognize the importance of early and liberal incisions through the drum membrane, in assisting nature to accomplish its purpose. Under proper antiseptic precautions such assistance frequently prevents suppuration in catarrhal disease of the middle ear.

The dry method in the after-treatment of such cases is advocated by a number of observers. Too much moisture weakens tissue resistance. A strip of antiseptic gauze introduced into the canal acts as a serviceable drain. When the aural discharge is copious, it is necessary to resort to gentle douching with warmed antiseptic solutions.

In chronic catarrhal diseases of the middle ear, free aeration of this region, together with proper ventilation of the Eustachian tube must exist before definite results can be obtained. The influence of nasal and pharyngeal disease upon ear affections is now thoroughly appreciated by workers in this field of medicine. Adenoid vegetations in the pharyngeal vault are known to be the direct excitant in suppurative conditions, especially in early life.

Free nasal respiration augments the Eustachian tube's function, and any obstruction to the circulation of air in these channels, must necessarily act as an incentive to aural disturbance.

Politzer's air douche and the Eustachian catheter maintain their usefulness in the treatment of middle-ear affections. Delstanche's masseur, combined with the Siegel otoscope form a valuable combination for the relief of ankylosis of the ossicular chain. When employed in this manner, ocular observations can readily be made, thus avoiding traumatism of the parts.

For some years the writer has found undoubted improvement in some forms of chronic catarrhal otitis, from the use of medicated oils, sprayed through the Eustachian catheter, and then forced into the middle chamber by compressed air. In these solutions benzoïnol was used as the "base" on account of its bland quality. The "return catheter" did not prove as serviceable as the ordinary hard-rubber instrument.

Knapp\* has called attention to the importance of the functional examination of the ear. In ascertaining the acuteness of hearing, he has found the human voice the best test. The tuning fork is of great value in determining the range of audition. Bezold's continuous tone series is a valuable apparatus of this kind. This "series" extends from the lowest C-ii (15 v.d.) to C<sup>3</sup> (1024 v.), and consists of ten clamped forks. It is not a handy affair, and cannot be employed in routine examinations, as too much time is consumed.

As yet no therapeutic discovery has been offered as a panacea for persistent tinnitus. This distressing symptom frequently baffles our earnest efforts. When the tinnitus is due to circulatory disturbances, some benefit may be obtained from the internal administration of cardiac sedatives. Thyroid extract has been recommended by some, and found wanting by others. Thiosinamine (Merck's) has been suggested in cases of tinnitus, where inflammatory products restrict the movement of the ossicles. Keloid tissue has disappeared under the internal administration of this drug, and the supposition is that fibrous changes in the middle ear will also be absorbed. Clinical data upon this subject is as yet quite meager.

The supra-renal capsule has shown marked contractile properties upon erectile tissue, especially in nasal congestions when applied locally or when taken internally. If ringing in the ears is due to an engorged state of the vascular apparatus, this remedy will no doubt prove of benefit.

Various surgical methods are offered in the hope of arresting this harassing symptom. Incision along the posterior border of the malleus, with the introduction of a blunt hook through the opening, and repeated traction upon the malleus handle has been attempted by some with success. Mobilization of the stapes, together with removal of the incus and malleus, is recommended by other aurists.

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\*Archives of Otolgy, August, 1898.

It is impossible to promise a cure by such treatment, for recorded cases prove that the tinnitus not only returned, but actually became worse after such interference.

Among the remedies regularly employed to overcome suppurative conditions, boracic acid still holds a prominent place. Antinoline, the sodium salt of nosophen, is recommended as a harmless, non-irritating and powerful antiseptic. Peroxide of hydrogen has proven itself an excellent pus destroyer. Formalin in weak solutions is also efficacious.

Tri-chloroacetic acid has been used with good results in stimulating the edges of old perforations of the membrana tympani.

In mastoid involvement, early operation is now universally endorsed. When palliative measures have not given the desired result within forty-eight hours, surgical principles should be put into effect. If suspicious of mastoid disease, there is no reason for postponing the radical operation. Delayed action frequently results in extended invasion, which often ends seriously.

In the after-treatment of mastoid disease we must be influenced by the condition of the wound. When feasible we should employ a dry dressing, thus avoiding an excess of moisture, which tends to generate unhealthy granulation tissue. Of late I have used nosophen as a dusting powder, and have found it very satisfactory. Have observed evidences of the powder in the mastoid wound five days after the dressing, with no signs of retarded healing. Nosophen gauze may also be substituted for iodoform gauze with good effect. This iodine preparation has also given satisfaction in nasal surgery, as it has a decided dessicating action.

Our foreign confreres laud the radical operation in persistent suppuration of the middle ear. Panse, Hartmann, Noltenius, Zaufel, Grünwald and Passow, close the mastoid opening by primary suture, while Trautmann, Jansen and Siebenmann prefer to treat the disease by keeping an open post-auricular wound. When active symptoms cease, they close the mastoid opening by plastic ingenuity.

It is true that a fistula behind the ear is a disfigurement, but if a life is at stake, no chances must be taken on account of cosmetic reasons. The good results reported by such observers should certainly stimulate us in treating this ailment in a similar manner. Though Stacke's method is not free from complications, cautiousness will materially aid in avoiding serious consequences. Facial paralysis does occur when least expected, but time and electricity will accomplish much in bringing back lost function.

Milligan\* also advocates early and more frequent resort to antrectomy in chronic suppurative otitis, which have resisted careful treatment for two months. The presence of an edematous swelling of the posterior-superior meatal wall, "the dip", is frequently the indication for opening the mastoid. Persistency of offensive discharge, and its appearance immediately after the middle ear has been cleansed, demonstrates the existence of a pocket of pus in the adjoining cavities. The surface temperature of the skin over the posterior wall of the meatus is a point of some diagnostic value in mastoid empyema. If disease exist, the temperature at this site is somewhat higher than at a corresponding area over the anterior wall.

In one hundred and fifty cases of mastoid operations analyzed by Milligan, ten (or  $6\frac{2}{3}$  per cent) were acute involvements and were accompanied by the usual symptoms. In these cases rapid healing followed the opening of the mastoid antrum, with recovery of hearing power. Out of the 150 cases operated upon, ten (or  $6\frac{2}{3}$  per cent) were subacute instances, without much local pain, with a copious discharge and progressive loss of hearing. Nine of these cases recovered with practically normal hearing. The other case did not remain under observation. One hundred and two cases (or 68 per cent) were distinctly chronic in character. Stacke's modified operation was performed in the last series, seventy-eight times. Out of this number, sixty-five resulted in complete recovery. All suppuration ceased and the antro-tympanic cavity became satisfactorily covered with skin. The hearing power was not improved by the operation.

This statistical report practically illustrates the position of radical treatment of chronic suppurative otitis. Clinical experience is the criterion upon which rational principles are founded. Conservatism is certainly a worthy quality, but when continuous treatment through the canal fails to accomplish a cure, we must unhesitatingly resort to more heroic methods.

Sinus thrombosis has received much attention during the past few years. Operations upon this channel are becoming more numerous and more successful. Timidity is gradually becoming a thing of the past, and free dissection of diseased areas is now boldly made. Whiting's† practical observations upon this affection are valuable contributions. The aurist has to deal with the infectious thrombus, which is due to the presence of chronic sup-

\**Journal of Laryng., Rhinolog. et Otolgy.* November, 1898.

†*Archives of Otolgy,* February, 1898.



purative ear disease. Many interesting remarks are made upon the pathology of the disease.

The diagnosis of an existing thrombus of the sigmoid sinus is not easily made. Pain, usually radiating from the ear and extending over the side of the head, with edema of the mastoid and occipital region are significant local indications. Chills, high temperature and malaises are systemic symptoms most commonly observed. Pulsation of the sinus has no diagnostic value.

In operating upon sinus cases it is considered best to uncover the sinus at the knee and descending portion. This may be done with the chisel and rougeur forceps. The mastoid antrum should always be opened as infection spreads from this cavity. The hypodermic needle is of service in locating the thrombus.

Ligation of the jugular vein in these cases is an important element. Where the obstruction does not extend below the jugular bulb, we may not be called upon to tie the vessel. If, however, we are not successful in re-establishing the circulation from below the bulb, Whiting states that it is the operator's imperative duty to ligate the vein immediately. Where toxic symptoms are pronounced, or where metastases are already present, authorities agree that it is necessary to tie the vein as a preliminary step in opening the sinus. When the jugular has been ligated in two places, the intervening portion should be resected, as the neck wound heals more rapid and satisfactory, and the liability of supuration is much less. Statistics show that in sinus operations, where simultaneous ligation of the jugular has been performed, the percentage of recoveries is greater.

Labyrinthine deafness is still refractory to our present treatment. In some of these dubious cases, pilocarpin and strychnia, together with applications of electricity, have given some improvement. Traumatic involvement of the inner ear is not as serious as a systemic invasion. Hypodermic medication is recommended in specific disease of the internal ear.

(LEDERMAN.)

38 East 60th St.

## THE ABUSE OF THE ELECTRIC CAUTERY IN THE NOSE.\*

BY H. HOLBROOK CURTIS, M.D., NEW YORK.

In 1889 I sounded in the Academy of Medicine a warning against the indiscriminate use of cocaine in the nostrils, and I was indeed surprised to find that the consensus of opinion at the time was in direct opposition to my contentions. Upon one or two occasions later I ventured the prediction that the galvano-cautery would not be employed for any length of time upon the septum narium, and it is in support of this hypothesis that I call the attention of the Section to one or two cases of grave complications following this procedure. My opinion has been that the use of the galvano-cautery is both unsurgical and unscientific, and admits in its employment the possibility of unfortunate results.

We are perfectly well aware that the use of the pocket handkerchief in too roughly drying that portion of the mucous membrane of the septum within the vestibule often gives rise to an excoriated condition, which leads to atrophy of the glands and ulceration of the membrane. The use of the finger nail in removing crusts in this vicinity frequently causes the same state of affairs, and, furthermore, the repeated introduction of germs, by reason of this habit, may induce the ulceration to go deeper and affect the cartilage until a perforation may obtain between the nostrils. We know that enchondroses and deviations are most frequently found in this locality, and over these thickenings of the cartilage the mucous membrane is usually tense and very thin. This circumstance will undoubtedly account for the malnutrition of the cartilage in this particular area, and will possibly explain the fact that the process of repair of the tissues is oftentimes unsatisfactory. The use of the saw, trephine or knife in these cases is such a simple procedure, and the results so uniformly satisfactory, it seems scarcely credible that there should remain any advocates for the employment of other methods to reduce such deformities. An experience of many years has shown me, however, that the practice of cauterizing the nasal septum prevails altogether too generally, and unfortunately has the sanction of some of our best known specialists.

It is not alone necessary that the nostrils become pervious as the

\*Read before the Section of Laryngology, N. Y. Acad. of Med., Nov. 23, 1898.

result of operation, as would seem to be the sole object to be attained by some, but we should carefully consider the question of the best means of preserving the integrity and continuity of the mucous membrane.

Virchow has recently shown that the process of repair in cartilage is not due to a process of exudation, but, like the process of repair in the cornea, due to a proliferation of pre-existing cells. Now the effect of the thermo-cautery is to change the nature of the cartilage cells and to prevent the power of healthy repair by proliferation, which most clearly demonstrates the reason of the unhealthy cicatrices which one finds in this particular cartilage of the septum after cauterization by heat. Granted that the repair of cartilage is not alone dependent upon the continuity of the perichondrium and mucous membrane covering the wound, we must look to the integrity of the cartilaginous cell elements themselves for a satisfactory process of repair. Heat, we know, is disastrous to this condition, and it is undoubtedly the changes effected in the cells themselves by that agent which accounts for the necrosis and consequent perforation so often found in the septum at longer or shorter intervals after the use of the thermo-cautery.

It would seem almost too trite a theme to call attention to the numerous cases of synechiæ in the nostrils, the result of cauterizing both the septum and the turbinates at the same time; but I have seen a patient to-day in my office who has just returned from Europe with an almost total occlusion of the left nostril, the result of repeated applications of the electro-cautery extending over a period of almost a year, at the hands of a foreign specialist of repute. In case the turbinates must be touched with the cautery the septum should be protected by tinfoil to avoid such accidents.

Before leaving the subject of the cartilaginous septum, I wish, for illustration, to cite two cases which occur to me:

Case 1. A young lady, aged twenty-three, blonde, well-nourished, came to my office in 1894 with a perforation in the septum the size of the thumb nail. She complained of excessive scab formation in the nostril and extreme nervousness, due to constant consciousness of a dry and irritable condition of the nose. Investigation proved that she had been operated on two years previously, on both sides, with the thermo-cautery, the wounds apparently healing at the time, but subsequently breaking down with resulting perforation. The patient had become a neurasthenic, and was constantly using all manner of sprays and ointments to attempt to relieve her condition.

Case 2. A woman of forty-five was referred to me for "dry

catarrh." I found a precisely similar condition, but to a greater extent, than in the case just cited. Although the nose was pervious, she suffered the greatest discomfort, and was constantly longing for air and felt she could not breathe. She had consulted many specialists, and had been sprayed and cauterized repeatedly. She had become a monomaniac on the subject of her nose. A female Cyrano de Bergerac. Her husband told me that her nose was her sole subject of conversation, and she was constantly oiling and spraying it in order to get air, as she expressed it; in reality to relieve a dryness due to great loss of membrane.

These cases represent, in an exaggerated degree, many of lesser magnitude in which the neurasthenia has not become so marked. That disturbance in the continuity of the septum causes disorders in the mental state has been observed by the writer. Frequently a loss of tissue, with perforation, has been observed to exceed in the exaggeration of mental reflexes any of the disorders we usually ascribe to a stenosis; but, while we may relieve a stenosis, we can never do much for the unfortunate who has an artificial fenestration of the cartilage of the septum.

It is to be observed that a congenital perforation is not accompanied by the same nervous phenomena which result from an acquired loss of tissue.

The use of the thermo-cautery upon the turbinate bodies is open to nearly the same objection, though from a totally different standpoint. We know the intimate anatomical relationship between the cerebral sinuses and the ethmoidal venous plexus, and Lange, Quinlan and Wagner, among others, report cases of fatal meningitis as the result of cauterizing the middle turbinate with electricity. Collins has called attention to the liability of meningitis from nasal operations in general.

Anyone who has read the very able paper of Dr. Robert Levy, presented before the Laryngological, Rhinological and Otological Society at Pittsburg, last May, and published in the *Annals of Otolaryngology and Rhinology* for the same month, will be surprised at the number of cases cited which have resulted fatally from comparative slight intranasal operation. The cases which have been reported in which death from meningitis, sinus thrombosis and the like, has resulted from the use of the electro-cautery upon the turbinates, or in searing the stumps of excised polypi, are offset by an equal number of fatalities, resulting from quite as insignificant operations within the nasal cavities, so it is hardly fair to use the statistics which might be collected against the use of the electro-

cautery without tabulating the many fatal results which have followed the removal of spurs and many other operations of even so slight a nature as the passage of a Bowman sound through the lachrymal canal.

That the thermo-cautery should never be used in the cartilaginous nasal septum I am convinced for the reasons above stated. In how far the electro-cautery should be employed upon the turbinates, I leave to the judgment of the Section. For my own part, I have done with the use of it, except in breaking down webs of adventitious tissues at the inner border of the vestibule.

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#### **An Operation to Remove the Deformity from a Fracture and Displacement of the Triangular Cartilage of the Nose—**

H. PEGLER, M.D.—*British Med. Jour.*, Dec. 22, 1897.

The contour of the nose was disfigured by a deep depression of the dorsal surface below the bridge, which latter, still maintaining the prominent position of an originally well-shaped nasal organ, exaggerated the deformity of the cartilaginous portion. The disfigurement was so considerable that it interfered seriously with the patient's prospects in business, and he was willing to undergo any operation that might be devised for his relief.

Chloroform having been administered, an incision was made along the middle lines of the nose, following the scar already there. The integuments were dissected back from the underlying cicatricial tissue, and held aside by retractors. The first step consisted in passing a rather stout silver wire through the sunken cartilaginous ridge from side to side (incorporating the two surfaces that appeared as if separated), and taking care that the needle did not encroach upon the mucous interior, by feeling with the tip of the finger that this depth was avoided. This portion was now threaded and under control, and capable of some elevation by traction upon the wire. The second step consisted in first sawing into the projecting angle of the nasal bones from above obliquely downwards and forwards until the osseo-cartilaginous juncture was reached.

At this point the sawn fragments (for there were two, a larger semi-cartilaginous on the right side and a smaller bony spicule on the left) were turned down, and made to assist in filling up in an inverted position the hollow below. A hole was next drilled with a center bit through the bones about 2 cm. above the sawn surface, and one end of the wire that had perforated the cartilages was carried up through it. In this manner gentle traction was exerted upon the depressed portion so as to elevate it in some degree to its proper position. Finally, the end of the same wire was brought down over the fragments of bone, and made to lie flat and keep them *in situ*. The wires were then trimmed, the wound thoroughly washed with antiseptic solution, its edges brought together by five or six catgut sutures, and covered over with a layer of gauze sealed down with collodion.

WATSON WILLIAMS.

## THE SUPRA-RENAL BODIES; SOME REMARKS UPON THEIR PHYSIOLOGY AND THERAPY WITH SPECIAL REFERENCE TO RHINOLOGY.\*

BY JAMES E. NEWCOMB, M.D., NEW YORK.

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Some time ago my attention was called to a possible use of extract of supra-renal capsule in certain affections of the nasal mucosa. Naturally I was led to look up the general subject of these structures, and it has occurred to me that it would be opportune to call to your notice some of the facts I learned. In so doing I disclaim any attempt at originality and bring to you only the ideas of others, begging to supplement these with a little personal experience along the line of therapeutic application.

In my own student days but little attention was called to these structures. We were taught that in Addison's disease the organ was affected, generally in the way of being the seat of tubercular inflammation, the cortex being hardened while the interior was soft and cheesy. We were taught that this lesion was fairly constant but that its relation to the disease was but imperfectly understood. The adrenals (to use the modern term) were included in that mysterious group of structures known as the ductless glands which were supposed to have something to do with the elaboration of the lymph and possibly of the blood. This view dates back to Haller in 1776. As to the constancy of the lesion, three possible conditions have been found to exist:

1. In Addison's disease, the adrenals may be diseased.
2. In the disease they may be intact.
3. They may be diseased without the presence of the symptom-complex which we now call Addison's disease.

Lewin's statistics show adrenal lesions in 74% out of 285 cases; Gilman Thompson found primary or secondary tuberculosis in 80% of all cases studied by him; in the remainder, lesions were wanting or else there were other atrophic states. A point made by Fenwick is that the bronzing of the disease is associated with cortical lesions of the adrenals.

\*Paper read before the Roosevelt Hospital Alumni Association, October 28th, 1898.

It has furthermore been shown that absence of symptoms when the structures are involved, may be due to the fact that other and healthy portions of the gland hypertrophy and take on a compensatory function. This view is set forth by Simmonds, who concludes that the capsules belong to the "pairing" organs of the body in which one undergoes vicarious hypertrophy upon disease of the other.

In 1869, Brown-Séquard advanced the theory that all glands, whether possessing excretory ducts or not, give off something to the blood that is of general importance to the organism in the direction of its general nutrition. Some twenty years later, he introduced into clinical medicine the term "Internal Secretion," giving it the sense in which we understand it to-day.

On the basis of this modern conception, every act of nutrition is accompanied by an internal secretion of some sort. It would seem that many, although not all, of the glandular tissues of the body add something to the blood, or in some way affect its composition, and that this activity is either essential or helpful to the maintenance of the normal functions of the organism. Naturally there grew out of this the idea of the therapeutic application of animal extracts. Some of us will recall the joy with which the advent into therapeutics of testicular juice was hailed by some of our jaded fellow citizens. But after a lapse of ten years the fact confronts us that with the exception of thyroid extract but little definite progress has been made in this direction.

Histological research seems to show that in the case of the thyroid bodies, the peculiar secretion whatever it may be, is contained in the so-called colloidal material which accumulates in the interior of the vesicles and that the act of secretion consists simply in the rupture of the walls of these vesicles at some point and the discharge of contents into the neighboring lymph channels.

In a general way what has been found to be true of the thyroid bodies seems to be true of the adrenals. These organs are found in all classes of vertebrates and would therefore seem to be structures of some importance. Experiments have been made with the human adrenals and also with those from the calf, sheep, cat, dog and Guinea pig. In 1856 Brown-Séquard showed that removal from the body of these organs caused the speedy death of the animals under experiment, death coming on sooner even than when the kidneys were extirpated. In some species of animals there seem to be accessory adrenals, and this fact may account for the discrepancies which exist in the published records of different experimenters. Removal of



one organ does not seem to cause any particular disturbance, but if both are taken out there follow extreme muscular weakness, asthenia and in the case of dogs a great fall of blood pressure and cardiac weakness.

The first definite results of the physiological properties of these organs came from injecting their extracts into living animals. In rabbits, convulsive movements appeared, followed by paralysis. More careful experiments made by Schaefer and Oliver, and also by Cybulski and Szymonowicz, showed that extracts of the medulla of the adrenals when injected into the veins of living animals produced the following definite results:

1. Extreme contraction of the arteries shown to be of peripheral origin.
2. A remarkable and rapid rise of blood-pressure which took place in spite of powerful cardiac inhibition and which was further augmented if the vagi were cut or the inhibitory nerves of the heart were paralyzed by atropia.
3. Central vagus stimulation so pronounced that the auricles came to a standstill for a time while the ventricles continued to contract, but with a slow, independent rhythm.
4. Great acceleration and augmentation of the contraction of the auricles and ventricles after section of the vagi—the auricular augmentation being especially marked.
5. Respiration only slightly affected, becoming more shallow.

The effect is temporary, depending somewhat on the dose. After a few minutes both circulation and respiration are restored to their normal. New injections promptly repeat the sequences named above. If the kidneys are tied off, the effect of the injections does not seem to be at all prolonged. There cannot therefore be a rapid elimination of the substance by the urine. It is probably destroyed or neutralized in the tissues.

As to the mode of action on the blood-pressure, all agree that the arterioles are constricted. The vaso-motor centers in the medulla and cord seem to be directly stimulated. Some believe that this action is exerted directly upon the muscular fibres themselves in the walls of the vessels. If the circulatory centers in the cord and medulla are destroyed no rise in blood pressure can be obtained. It is also claimed that the ganglia in the substance of the cardiac muscle are directly stimulated and that this is a factor of importance in the circulatory condition.

Thus much having been determined, the next question to be considered is, does the substance which produces these effects exist normally in the adrenals or is it a post-mortem product?

It happens that we have direct evidence that the substance is a product of the normal metabolism of the gland. The Polish observers named above found that blood drawn during life from the supra-renal vein would, when injected into the circulation of a healthy animal, produce the same effect as supra-renal extract, although less marked. Blood from any other vein did not produce this effect. As the blood from the adrenals always contains the active principle, we are justified in concluding that the latter is a normal product of the metabolism of the medullary cells of the gland and that it is being discharged directly into the blood. *It must therefore be exerting a constant influence upon the blood pressure.*

Hence the deduction that the true physiological office of the adrenals is to furnish this stimulant to the blood. It is also thought to act as a tonic upon all muscular tissues, though it is still disputed as to whether this tonic effect is exerted directly upon the muscular protoplasm or upon the various nerve centers which govern the muscles. A most suggestive fact from the clinical standpoint is that in Addison's disease, the adrenals do not contain this stimulation substance.

The foregoing views are not however accepted without some modification, that is, there is another hypothesis as to the office of the structures. They may, like the thyroids, furnish an antitoxine secretion capable of neutralizing or destroying certain products of body metabolism. These toxins which are to be neutralized represent retrograde metamorphosis. They are the results of metabolism of the muscular tissues. The asthenia which follows the removal of the adrenals is somewhat like the effect produced by injecting extracts of fatigued muscle into the general circulation. The main argument in favor of this view is the fact that if the blood of an animal deprived of its adrenals and beginning to show the usual results of this deprivation, be injected into the circulation of another animal from which the adrenals have just been removed, a toxic effect is noted. It must be added that the weight of evidence is in favor of the stimulation theory.

The next point to consider is, what is the nature of the substance or ingredient of the adrenals which exerts these effects?

Prof. R. H. Chittenden says that there is some evidence of the existence of two distinct bodies, physiologically active; one insoluble in 90% alcohol, possibly the substance named by Fränkel "sphygmogenin," which increases blood pressure, while the other, which readily dissolves in alcohol, causes paralysis of the heart and muscles, death ensuing from suffocation. The active principle is

non-volatile and its activity is not destroyed by mineral acids or by gastric digestion. It is gradually weakened by alkalis.

According to others, the toxic action is due to the presence of neutral glycono-phosphate. The active principle seems to reside in the medulla of the gland. It is not destroyed by boiling and does not dialyze. Experiments made by the observers at Johns Hopkins Hospital seem to prove that the active principle is alkaloidal and that in all probability it belongs to the pyridine bases.

Finally, let us consider the therapeutic possibilities which adrenal extracts suggest.

Naturally Addison's disease is the malady coming first into one's mind. As to positive results obtained in the treatment by adrenal extract in this disease, it may be said that Kinnicutt was able in 1897 to collect notes of forty-eight cases thus treated. Of these six were reported as well, twenty-two improved, eighteen unimproved and in two the treatment had seemed to aggravate the symptoms. Forty-five grains of the gland are suggested as the daily maximum dosage.

The extract has also been used as a heart tonic. It is said to increase the number of the red blood cells. It should be given by the mouth. Attempts to administer it under the skin have not been satisfactory, and moreover there seems to be an especial liability to abscess formation. It has relieved attacks of angina pectoris.

As to the causes of failure in certain cases of Addison's disease, it must be remembered the organic change is not always confined to the adrenals. It frequently and progressively invades neighboring structures. All the extract can do is to supply to the general system material which should have been furnished by the healthy adrenals. Obviously the local lesion cannot be in the least benefitted. If the latter be cancerous or tubercular, or of any nature which makes it progressively invasive of new tissues the extract must fail.

Locally the extract has been used in solution in various diseases of the eye, ear, nose and throat. For this purpose a watery preparation can be employed. It does not keep well and must be freshly made. From ten to twenty grains should be dissolved in an ounce of water and the resulting mixture filtered after being thoroughly shaken and allowed to stand for several hours. In regard to the amount which a given quantity of water will take up or exhaust, I would say that after mixing sixty grains with two drams of water, which by the way should be boiled before using, and allowing the same to stand for several hours, it was found by weighing the dried filtrate that only about one-half of the sixty grains had been taken up. This would seem therefore to be the maximum strength of

solution which it is possible to obtain, *i. e.*, fifteen grains to the dram.

Upon mucous membranes it is without doubt the most powerful astringent we have, and it can be used for a variety of purposes. One drop of a one per cent solution instilled into the eye will blanch the conjunctiva and lid in forty seconds. Hence a possible use is in cases of hyperesthesia of the conjunctiva where it is desired to induce anesthesia by the later use of cocaine. Adrenal extract is not anesthetic or antiseptic. It is also incompatible with cocaine and must therefore be used in alternation with the latter.

My own personal attention to this subject is derived from an interesting paper read by Dr. Henry L. Swain, of New Haven, before the last Congress of the American Laryngological Association held in Brooklyn in May of this present year. His conclusions are as follows:

1. The aqueous extract of suprarenal gland is a powerful local vaso-constrictor agent and a contractor of erectile tissue. It can be used in very considerable amounts without dangerous or deleterious effects, locally or constitutionally.
2. These same effects can be reproduced in the same individual apparently any number of times without entailing any vicious habit to either the tissue or the individual.
3. The use of the extract seems to heighten the effect which might be expected from the local use of any drug.
4. In acute congestions, it has the widest application and greatest opportunity for good, but in certain chronic conditions of the hay-fever type, where redundant tissue seems prone to develop, it can be relied upon as one of the most helpful adjuvants at our command.

My own experience with the remedy has been somewhat limited, but I am prepared to fully corroborate what Swain has said. It is really remarkable to notice how the redundant tissue so often met with in the nose will shrivel and become pallid when the solution is applied. Of course, in hay fever, it is only alleviative. This disease is now recognized as a composite of three factors:

1. A neurotic predisposition which can be referred to the uric acid diathesis or other constitutional vice.
2. A local abnormality in the nose, and
3. The impact upon the diseased tissue of some irritant from without. This latter may be dust, plant-pollen or any one of a large variety of substances.

Consequently the extract will only relieve. But it does relieve to a very great degree the most troublesome symptom from which these

patients suffer, namely, the stoppage of the nostrils by the engorgement of the intra-nasal tissues. It has been used by many of the workers in this special field, and their testimony is practically unanimous in its favor. Occasionally we meet with patients with some personal peculiarity which seems to make them obdurate to its effects. One or two colleagues with whom I have spoken have had this experience, but from all the testimony at our command there is no reason to doubt but that it is a valuable adjuvant to our therapeutic resources.

So far as I know, Dr. W. H. Bates, of New York, was the first in this country to employ the remedy for local affections. It comes in commerce as the saccharated extract of the adrenals of the sheep, and costs about two-thirds as much as cocaine.

118 West Sixty-ninth Street.

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#### **Suprarenal Capsule in Eye, Nose and Throat Work—W. F.**

SOUTHARD—*Pac. Med. Jour.*, Vol. xli, No. 11, Nov. 1898.

The most satisfactory results have been from its use in operations on the nose. The author at first found it necessary to have a new solution made every two or three days. Lately, however, laboratory experiments made under his directions had succeeded in making a stable solution by prolonged boiling without in any degree impairing its virtues.

In using the solution, the nose is first cleansed; a 4 per cent solution of eucaïne is then applied upon cotton for five or six minutes. This is followed by a 4 per cent solution of the suprarenal capsule applied on cotton.

EATON.

**SOME ANATOMICAL POINTS IN THE STRUCTURE OF THE  
LINGUAL TONSIL OF PRACTICAL BEARING  
ON ITS PATHOLOGY.\***

BY LENNOX BROWNE, F.R.C.S.

Senior Surgeon to the Central London Throat and Ear Hospital, etc., etc.

Kronenberg in his classical articles on diseases of the fourth tonsil, which appeared in the *Berliner Medizinische Wochenschrift* in 1894, is so good as to ascribe to me "The merit of having decidedly demonstrated that the complications of symptoms which have been called *globus hystericus*, and which up to then had been considered the expression of a functional neurosis, is frequently due to real anatomical changes in this region, and had only been overlooked because examination had been incomplete", and Escat, of Toulouse, in a recent very complete report on the subject to be presented to the French Society of Otology, Laryngology and Rhinology, also says that "Lennox Browne appears to be the first author who has occupied himself with hypertrophy of the lingual tonsil." These remarks refer to my communication to the International Congress of Laryngologists, held at Milan in 1880. Since that time the literature of this region has become so considerable that a complete bibliographical list contains the names of at least one hundred authors of all nations who have contributed to our information on the subject. As usual in matters laryngological, the United States is well represented, and I find recognition of the importance of diseases of the lingual tonsil in articles by Holbrook Curtis (1884 and 1889); Gleitsmann (1887); Beverley Robinson (1888); Farlow (1888); Roe (1889); Richardson (1889); Clark (1890 and 1896); Bosworth (1892); Clarence Rice (1894); Chamberlain (1894); Bryan (1896); Quinlan (1897), and Bernays. There may be others whom I have overlooked. I do not fear therefore that at your association I shall find sympathy with the "all but" contemptuous manner with which the subject is ignored in the contribution on diseases of the nose, pharynx and larynx to the latest British system of medicine; for what is said is contained in less than twenty lines in an article which extends to close on 200 pages. I may perhaps remark that, short as the observations are, they contain one original suggestion,

\*Read before the American Laryngological, Rhinological and Otological Society, 1898.



namely, that "the employment of the galvano-cautery, which is often recommended is not free from the risk of causing violent parotitis." I presume that "parotiditis" was the word intended to be used, but in any case, those of us who are anatomists as well as those who are surgeons—and the throat specialist should be both—can afford to smile at this timorous warning.

The reason I quote this article is that presumably representing the most recent views, it assumes that there is an absolute identity between diseases of the lingual tonsils and of the palatine tonsils, and this I suspect is a very general misconception. It is however not supported by what we know of the anatomical and histological features of the various tonsillar structures which go to form the lymphoid ring of Waldeyer. For example, Escat has given it as his opinion that the lingual tonsil is in the young child not only fully developed (in this he differs from Bickel) but at its period of greatest vitality; and that as in the case of the pharyngeal tonsil and in perhaps a less degree in the palatine glands, the lingual tonsil enters into a period of atrophic retrogression at the age of puberty. And further that in early adolescence, at the age of twenty years, the lingual tonsil ends by being reduced to some follicles of lenticular shape, so scattered as to represent complete atrophy. This view, which is also, I think, very generally adopted is not only contrary to fact, but it is surely inconsistent with the remark of this particular observer which again represents general knowledge that chronic hypertrophic inflammation of the lingual tonsil is certainly one of the most interesting for practicing laryngologists, for it is without contradiction the most common,—and again that circumscribed inflammation of the fourth tonsil is observed almost exclusively in the adult.

My experience on this question, neither short, small nor unobservant, has led me to state in the forthcoming fifth edition of my treatise on diseases of the throat and nose, that while it may be true that the lingual tonsil is equally fully developed with the pharyngeal at early life, the difference between the lingual tonsil and the pharyngeal and the palatine is the circumstance that the first not only does not undergo an atrophic retrogression at puberty, but that it continues to grow while the others are relatively diminishing. Bickel indeed, in an able article in Virchow's Archives (1884) takes the view that the fourth tonsil, as the lingual double tonsil has come to be called, is less completely developed in childhood than are the faucial and pharyngeal. However that may be it is exceedingly rare for the lingual tonsil to be hypertrophied before



the period of puberty. The recorded cases of such a condition in the child are indeed very few—two only I think—and, in one which occurred at the age of seven years, McBride, who reports it, states that there were no symptoms. The other case, that of Hickman, was congenital, and death took place shortly after birth, from asphyxia, directly referable to the growth.

Admitting with Swain, Schœde, and other anatomists, that the general structure of the whole tonsillar ring is histologically identical, there are certain important points of distinction to which my attention has been drawn by my colleague, Wyatt Wingrave, pathologist of our hospital. In the first place it is quite common to find in the pharyngeal tonsil, patches of honey-combed homogeneous colloid-looking substance enclosed in what is apparently the remains of a lymph vessel, for these channels are for the most part much dilated. This substance is probably fibrinous in origin, the result of thrombotic changes. The reticulum itself also appears to be undergoing a similar degeneration. These conditions may reasonably be interpreted as indicative of a retrograde metamorphosis. They are never seen in either the faucial or lingual tonsils.

Another point is that the mucous and albuminous glands of Henle and Salter, only occasionally seen in the palatine tonsil and never in the pharyngeal, are notably abundant in the neighborhood of the lingual tonsil, it being exceptional not to find them. Moreover below the lymphoid layer of the lingual tonsil, skeletal muscle fibres are plentiful, and the cellular tissue is more dense than in the faucial.

A further point of anatomical distinction is the occasional presence of crypts in the lingual tonsil, lined with columnar ciliated epithelium, a peculiarity to which attention was first drawn by Wyatt Wingrave, and one not to be found in the other tonsils. The phenomenon is not perhaps of clinical interest since it is of a purely vestigial nature.

It is again worthy of notice that such early observers as Kölliker, Luschka, and Lewin have all drawn attention to the very superficial position of the veins at the base of the tongue, and I venture to question the accuracy of Escat's statement that they are invisible in the young child, because they are hidden in him by the thick bed of lymphoid tissue, for such a reason does not hold good with the undoubtedly increased prominence of the veins of other portions of the tongue with the advance of years, and whether as obvious in the child as in the adult, the veins in this situation are *always* superficial. Nevertheless it is doubtless true that varices

of the veins at the base of the tongue may exist without overgrowth of the lingual tonsil, or even when it is atrophied and that this varix constitutes of itself a diseased condition which gives rise to symptoms of such importance as to demand treatment.

The pathological bearing of the anatomical facts to which I have ventured to draw the attention of the Association is not a fanciful one. We can understand that not possessing the various evidences of a tendency to degenerate of which the colloid process is but one of those possessed by the pharyngeal tonsil, inflammatory diseases of the lingual tonsil are pronounced at periods of life when atrophic changes are as a rule complete in the pharyngeal tonsil and advanced in the palatine. For example, on the morning of the day on which I commenced to inscribe these remarks, I was consulted by a lady aged 72, on account of pharyngeal tenesmus—a term originated by me and now generally accepted. The symptoms were found to be due to a notable hypertrophy of the lingual tonsil, with marked varix.

The abundance of mucous and albuminous glands which we find in the lingual tonsil, gives a higher degree of moisture to that region and may account for the lessened disposition to acute inflammations of this structure, for not only does the careful collection of all recorded cases bring but very few to our knowledge, but in our daily experience phlegmonous, or even catarrhal inflammations of the lingual tonsil are surely of quite rare and exceptional occurrence. Nor do I think that it is common for us to witness infectious inflammations in the lingual tonsils. I cannot recall a single example in my experience in which diphtheria has selected that region as a *primary* site and extension thereto is almost unknown. In the case of diphtheria the membrane is seen to pass from the palatine tonsil by the faucial pillars to the sides of the epiglottis and to creep round by the aryepiglottic folds into the larynx. As to scarlet fever, many cases may commence in the lingual tonsil and extend to the palatine but I have not seen the reverse process when the palatine tonsils are the first to be attacked. Again as I have witnessed it, syphilitic manifestations in the lingual tonsil are not common. It is surely not unreasonable to suggest that the comparative immunity to coccal and bacillary infection enjoyed by the lingual tonsil is due to the greater flushing of this region by the abundant secretion of the mucous and albuminous glands.

The intense pain which is sometimes experienced in acute inflammatory conditions of the fourth tonsil is referable to direct

stimulation of the glosso-pharyngeal nerve, whilst laryngeal symptoms common to chronic hypertrophy may be explained by reflex irritation of fibres of the superior laryngeal nerve distributed to this area. In the close intimacy of the lingual tonsil with the muscular tissue of the lingualis—the essential muscle of the tongue—may be explained the impaired mobility of the organ when the lingual tonsil is acutely inflamed. It is not indeed at all straining the situation, to point out that this muscular bed of the lingual tonsil differs considerably from the dense fascia on which the palatine tonsils rest; and likewise from the osseous character of the greater part of the tissue underlying the pharyngeal tonsil.

A reference to the plates of Sappey enables us to appreciate the greater liability to concomitant adenopathy in inflammations of the lingual tonsil than is generally seen with the palatine and in the dense character of the cellular tissue, the comparative rarity of extension of morbid processes beyond the lingual tonsil itself.

Lastly, not to carry this point too far, may not the superficial and plentiful arrangement of the venous plexus at the base of the tongue account for the tendency to chronic hypertrophy and engorgement as a result of vocal abuse, for I do not think that either Holbrook Curtis, or any one else who has written on this subject, has pointed out that chronic hypertrophy of this region, so common in singers and orators, is found for the most part in those who improperly use or abuse the voice.

Verneuil's statement that there is a deep as well as a superficial varix of the veins at the base of the tongue, and the anatomical observations of Zuckerkandl and Foucher, that the lingual nerve is accompanied by a satellite vein, are of importance in relation to varix as a cause of paraesthesiæ glossodynia and other neuroses in this region.

Although not strictly within the scope of this short communication it may be of interest to the fellows of this Association to learn that so far from varix in this situation having been first written about and the condition described as one of "throat hemorrhoids" by so humble a person as myself, the subject was deemed worthy of clinical remark and even the term "hemorrhoids" employed so early as the fourth year of Practical Laryngoscopy by one of its first and most distinguished pioneers—G. Lewin of Berlin. At page 257 of his *Klinik der Krankheiten des Kehlkopfes* published in 1863 we find the following:

"*Pharyngitis varicosa*. This disease may cause bleeding. I may mention here the case of Dr. B. He suffered for many years

from blood-stained sputum, with and without cough. He had consulted authorities of several universities. Finally he sent to Geheimrat Frerichs, who suspected the real source of the hemorrhage, and addressed the patient to me. I found on examining him with the laryngoscope an injection of the mucous membrane of the lower posterior wall of the pharynx; this place was occupied also by some small varicose veins, which went in the direction of the larynx and esophagus. These varicose veins showed traces of recent bleeding.

"I may mention other cases, in men as well as in women, who seemed to be affected with general plethora, and who said the cause of their trouble was 'hidden hemorrhoids' (*Versteckte Hämorrhoiden*). I found in the throat the following state: From the insertion of the epiglottis to the middle of the tongue, a number of injected, blue-reddish, elevated veins were seen, which crossed the circumvallate papillæ. Some veins were found near the margin of the tongue, giving off small branches, which terminated in small points, of enlarged veins, the size of a pinhead, the whole thing looking like 'grapes'. A number of these patients suffered from blood-spitting.

"In some of these cases I saw in the fossa navicularis laryngis, parallel to the 'plica crico-pharyngea', a bluish-red vein, as thick as a crow-quill. All these persons were healthy, except that they suffered from abdominal and hepatic plethora and their throat troubles".

These last, in 1865, Lewin more fully described as "sensations of scraping, burning, and dryness in the pharynx" (*Kratzen, Brennen, Trockenheit*).

Attached to this paper I send a facsimile reproduction of Lewin's somewhat conventional illustration of this condition as he witnessed it in the tongue.

Lastly I would say a word on the anatomical relations of a troublesome affection of the tongue—the imaginary ulcer—which it is true may arise from hypertrophy and varix of the lingual tonsil, but is quite as often due to slight mischief in another situation.

It is known that the taste buds chiefly occur in the circumvallate papillæ. They are also to be found in the irregular nodular elevations constituting the lingual tonsils. But they also exist in the "fimbriæ linguæ", two rough patches, which are seen on each side of the tongue just in front of the anterior faucial pillars—the mucous folds from which to the tongue, lax when the organ is at rest,

form the palato-glossal folds when it is protruded. Now these patches correspond morphologically with the "papillæ foliatæ" of the rabbit and it is only in accordance with our general knowledge of vestigial elements, that this site should be prone to pathological processes.

**The Diagnosis between Tubercular Syphilis of the Tongue and Syphilitic Glossitis**—PINI—*Ann. des Dermatologie et de Syphiligraphie*, October, 1898.

Tubercular syphilis of the tongue:

1. Begins in the submucous connective tissue, which corresponds to the *rete mucosum* of the skin.
2. Spreads from the center towards the surface, deforming and atrophying the papillæ.
3. Profoundly deranges the disposition of the elastic fibers and of the muscular elements, which disappear, leaving no trace.
4. Has clearly defined limits.
5. Has an origin, a structure and an anatomical seat which do not differ from those of cutaneous tubercle.
6. Shows no tendency to the formation of giant cells.
7. Presents vascular alterations consisting of proliferation and detachment of the endothelium and infiltration of the external tunic without evident traces of an endarteritis.

Syphilitic glossitis on the other hand:

1. Has a point of departure notably deeper and more exactly in the muscular parenchyma.
2. Has no defined limits, and easily invades the entire organ.
3. Presents an exuberance of the mucous epithelium, which sends irregular processes into the corium.
4. Consists in its inflammatory process of the same morphologic elements as tubercular syphilis, with giant cells in addition.
5. Shows evident new formation of connective tissue.
6. Comprises a newly formed connective tissue of intricate disposition, which imparts a very considerable resistance to the organ.
7. Produces deformity, *e. g.*, lobulation or fissures of the surface, resulting either from loss of substance by ulceration or from contraction of the newly-formed connective tissue.

SCHEPPEGRELL.

## A CASE OF DIPHTHERIA OF THE FLOOR OF THE MOUTH.

BY J. L. GOODALE, A.M., M.D.

Assistant Physician for Diseases of the Throat in the Massachusetts General Hospital and in the Boston Children's Hospital.

Isolated diphtheria of the mouth is a sufficiently rare condition as to deserve more than a passing notice. In the following case, which came under my observation, the diagnosis was established by microscopical examination of a portion of excised tissue:

The patient was a female, thirty-six years of age, married, with negative previous history. *Present illness.* Last evening while in her usual good health, she noticed a gradually increasing thickness of speech, together with a swelling of the floor of the mouth, coming on without apparent cause, and attended by marked salivation. Swallowing became almost impossible. Movements of the tongue were difficult, but not painful.

Examination twelve hours after onset of the symptoms showed the patient to be a fairly well developed woman in apparently good health, except for the lesions within the mouth. The floor of the mouth exhibited a marked diffuse swelling of soft elastic consistence. On either side, a fold of membrane running antero-posteriorly appeared as a reddened prominent ridge, on a level with the top of the inferior incisors, firm and elastic in consistence, translucent except on the anterior margin and extreme summit, which was covered with a white exudate. This exudate on close inspection was seen to consist of a fine delicate tracery of white lines, roughly parallel to each other, arranged in undulating waves and in places aggregated to form white opaque areas.

Moderate salivation was present. No foul odor was apparent beyond that which might naturally proceed from several carious teeth. The gums were reddened, moderately spongy and swollen. The glands below the jaw were moderately enlarged but not tender. The general condition of the patient was not affected.

Under a simple cleansing mouthwash the conditions rapidly improved, the exudate disappearing in three days and the floor of the mouth appearing normal at the end of a week.

### MICROSCOPICAL EXAMINATION.

A wedge-shaped piece was excised from the summit of the ridge



at a point covered macroscopically with a white exudate. Alcohol hardening. Sections stained in hæmatoxylin and eosin showed the epithelial cells to be widely separated from each other by the penetration between them of great numbers of leucocytes and an abundant mass of a mesh-like exudate. In places these epithelial cells are exfoliated in coherent masses. In most places the individual epithelial cells exhibit no change in their protoplasm or nuclei, but here and there where a few are surrounded by an especially large mass of exudate and leucocytes their nuclei stain faintly or not at all. The submucous connective tissue is scarcely to be perceived, its place being occupied chiefly by numerous leucocytes and masses of exudate. The leucocytes are less abundant than in the mucous membrane. Except for their wide separation from each other the individual fibres show no abnormality. A considerable number of red blood corpuscles are seen intermingled with the leucocytes in the meshes of the exudate.

On staining by Weigert, the exudate is found to consist of fibrin. This is chiefly found in the deeper portions of the mucous membrane, where it is spread out in a well-defined fairly even line from which finer prolongations are given off to the surface and to the submucous tissue. There is also seen a separate fibrinous mesh diffused throughout the deeper layers of the submucosa, increasing in density with the depth.

Examination of sections stained in polychrome methylene blue and eosin show that the leucocytes above referred to, consist of small mononuclear and ordinary fine granular polynuclear cells in about equal proportion, together with a considerable number of eosinophiles. The relative proportion of these cells is about equal throughout the specimen. There are no cells found resembling plasma cells or mastzellen.

In specimens stained with Loeffler's alkaline methylene blue, a considerable number of bacilli are found, evenly dispersed throughout the region of the fibrinous exudate. These bacilli have the characters of bacilli of diphtheria, appearing as small, short, straight or slightly curved rods, from two to three times longer than broad, with rounded ends, and often staining unevenly throughout their length. They decolorize by Gram.

A few cocci in pairs and short chains, staining by Gram, are found lying upon the mucous membrane, but not below the surface of the fibrinous exudate.

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## THE PHONENDOSCOPE AS A TEST FOR SIMULATED DEAFNESS.

BY JOHN A. THOMPSON, M.D., CINCINNATI, OHIO.

I was asked recently to examine a man, who claimed as a result of an injury, that he was totally deaf in the right ear. Inspection of the ear showed only the changes common to catarrhal otitis media. The tuning fork was heard readily, by bone and air conduction, by the left ear. He denied positively, that he could hear any sound from the fork in the right ear.

I put the tubes of the phonendoscope in his ears and touched the tympanum of the instrument with the handle of the vibrating fork. The sound was heard very distinctly on the left side only, according to the patient's statement. I held the instrument below the patient's chin, where he could not see it. I then attracted his attention to the fork by changing the clamps on it. At the same time, with the thumb and finger of the left hand I detached the tube from the phonendoscope, that connected it with the left ear. When the handle of the vibrating fork was again touched to the tympanum of the instrument it was immediately heard and the difference of pitch appreciated.

It was thus demonstrated that the deafness was simulated. The tube remained in the left ear, thus allaying the patient's suspicions. As the instrument was not connected with the ear claimed to be healthy, no sound could be transmitted to that side.

Anyone can prove by a test in his own person, that it is impossible to hear the fork in the ear not directly connected with the phonendoscope. This is a simple and effective test for simulated deafness in one ear. The method is superior to any with which I am familiar.

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## NEW INSTRUMENTS.

### A LOOP-FORMER.

BY EMIL AMBERG, M.D., DETROIT, MICH.

If a soft wire is to be used to remove a polyp from the ear, it is important that there be not much resistance at that part of the wire which enters the canula of the polyp snare. When the resistance of the wire at that spot is to be overcome, the instrument frequently makes a slight movement out of place. This means much, when we consider the minuteness of the field of operation.

The accompanying figure (about one-half natural size) shows a pyramidoid-shaped piece of metal, by the aid of which the loop of



soft wire can be formed so that the wire will slide smoothly into the canula.

The sharp edge of the instrument looks toward the opening of the canula.

The conical shape permits loops of different sizes to be formed.

The instrument was made for me by Messrs. Codman & Shurtleff, Boston, Mass.

32 Adams Avenue, West.

## CORRESPONDENCE.

PHILADELPHIA, November 15, 1898.

*Editors THE LARYNGOSCOPE:*

In the November number of *THE LARYNGOSCOPE* is published a letter from Dr. Watson purporting to be an answer to mine published in the September *LARYNGOSCOPE*. Watson repudiates the statement attributed to him that my operation is identical with his. He, however, intimates that it is a modification.

My operation is *not* an extension upwards of the ends of his incision at the crest of a horizontal deviation, but a U-shaped incision, *not in*, but *around* the deviation.

Had not the clear statement of this fact in the original description of my operation and its emphatic reiteration in my September letter been ignored, and the essential feature misstated at least by inference there would have been little ground for controversy.

The cuts Figs. 2 and 3 reproduced by Watson for comparison with his show this difference in the incisions; but Fig. 4, a vertical sagittal section to the right of a deviated septum, ignored by Watson, was designed for the express purpose of showing the exact position and shape of my section: *not* at the crest of the deviation where other operators, as well as Watson, made their sections; but *around* the entire deviated area, thus utilizing as a means of support not the *bevel* of an incision, but the *whole* of the septal *redundancy*, both in a horizontal and vertical direction. In other words, the *whole* deviation is swung into the median line like a trap door upon a spring hinge, the tension of which can often be reduced by manipulation, while this door or flap is locked into its new position not only *below* but in front and behind by all the septal redundancy.

The operation seems so novel and unique that I cannot help feeling that it requires much explanation, a vivid imagination and some assurance to assume that it is merely a modification of an operation at the crest of a septal deviation.

Watson claims priority in what he terms the "essential feature" or of my operation which he states he "devised and described," *i. e.*, made a straight incision at the apex of a septal deviation and caused the upper to hook over the lower immovable flap. Watson states in his description of his operation that "where the deviation is marked and down, it is impossible to bring the lower fragment into line."

From this it logically follows that every operator who made an incision through the crest of such a deviation must have hooked the upper or movable fragment over the lower. A somewhat superficial search through the literature of the subject would indicate Sajous as the first to perform such an operation in 1881.

It is in reference to such septal deviations near the floor of the nose that I remarked the resemblance of Asch's operation not to Watson's, but to the combination of Ingal's and Watson's. If the vertical portion of the usual crossed incision is prolonged downward below the horizontal into that portion of the septum which Watson states cannot be brought into line, it would be inutile. In each operation the flaps are triangular. As the matter is not germane to this controversy it is of importance only as affording Watson an opportunity to use intemperate expressions as regards a not uncomplimentary allusion; as the Asch operation meets all requirements, both as regards redundancy and resiliency. A simple straight incision does not.

There remains to be considered only what may be called the historical portion of Watson's letter.

The basis for Watson's assertion that as soon as I had read the description of my operation all present who were familiar with his operation gave it as their opinion that in its essential features it was the same as his, rests on the fact that in the discussion Dr. Vansant stated that it was the same and was corrected by the next speaker, Dr. Gibb. I do not recall that anyone else alluded to the subject.

The assertion that at a certain medical meeting his operation was definitely brought to my notice rests upon the fact that not at, but after a meeting adjourned for lack of a quorum we had a few moments conversation as regards our methods of dealing with septal deviations. I am not aware that I received any new or useful information as I was then doing a modified Seiler operation at or below the crest of the deviation; nor was I aware that Watson had an operation that he considered original. When after my paper was in print I was first made aware of the nature of Watson's claims to originality, I made every effort that my foot note should express not *my* but *his* exact views on the subject. This I did from the very natural desire to give a colleague as much or more credit than was due, the wish to avoid all controversy and the fact that it makes no difference as far as my operation is concerned who first made an incision through the crest of a septal deviation and hooked the movable upper flap over the lower. That was decidedly *not* my operation.

After treating Watson's claim with perhaps more than the usual

complacency, professional courtesy and gentlemanly consideration, my amazement was great when I became aware that an attempt was apparently being made to appropriate my operation. Under the circumstances the best thing to do seemed to write a paper for the *Philadelphia Polyclinic*, the journal of an institution with which Watson is connected, and clearly state the differences between his operation and mine and also compare his claim to originality with quotations from Cohen, Sajous and Roberts. This paper was published August 20th, one month before the date of Dr. Watson's letter to THE LARYNGOSCOPE. A reprint was sent Dr. Watson.

It is apparent that the history of the operations can have but a remote bearing upon the controversy which it will be seen I made considerable effort to avoid; but this history as stated by Watson and corrected by me may serve the useful purpose of explaining how, without ulterior motives, so able a man assumed a position which seems not easily tenable.

The following is Watson's description of his operation, italics and explanatory note are mine:

"In many cases, especially where the deviation is marked and low down, it is impossible to bring the lower fragment into line. The result is that there is nothing to meet the upper fragment and non-union results. To overcome this difficulty, I have devised the following *modification* of the operation\*: Instead of cutting out an elliptical piece along the horizontal line, I make an incision, which may be called a bevelled incision. The edge of the knife is directed upward and toward the opposite side, and carried through the cartilage, but not the mucous membrane of the opposite side. The incision is made *just at the crest of the deviation*. Any vertical deviation is cut out, as before described. The upper portion is then pressed over toward the other side, where it hooks itself on the lower, and is thus held in place."

E. B. GLEASON, M.D.

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\*Ingals, previously described.

# EDITORIAL DEPARTMENT.

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## EDITORIAL.

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### FOURTH ANNUAL MEETING OF THE WESTERN OPHTHAL- MOLOGIC AND OTO-LARYNGOLOGIC ASSOCIATION.

#### CARNIVAL MEETING.

The fourth annual meeting of the Western Ophthalmologic and Oto-Laryngologic Association will be held at New Orleans, February 10 and 11, 1899, these dates being selected in order to give the visiting members an opportunity to see New Orleans during the celebrated Mardi Gras Carnival.

Reduced rates will be issued by the railroads for this occasion.

## SCIENTIFIC PROGRAM.

An interesting program is being prepared and will be mailed in due time by the Secretary. A full attendance is confidently expected. Prominent men have been invited to deliver the opening address to the Ophthalmologic and to the Oto-Laryngologic Sections. The meeting will be held at the New Orleans Polyclinic building.

## ENTERTAINMENTS.

On Friday evening, February 10, the members are invited to a reception given by Dr. and Mrs. Scheppegrell, and on Saturday evening a number of boxes will be retained at the French Opera House for the members and the ladies who accompany them. On Monday and Tuesday the carnival processions will be seen. Convenient places for observing these will be furnished by the Arrangement Committee. The Rex Carnival Ball will take place Tuesday evening, invitations for which may be obtained by members applying to Dr. Scheppegrell, Chairman of the Arrangement Committee, New Orleans, before January 15th. The Arrangement Committee will also provide members with cards for the various clubs of New Orleans.

## PRELIMINARY PROGRAM OF THE OTO-LARYNGOLOGIC SECTION.

Dr. Charles E. Sajous, of Philadelphia, will give the address before the Section. The subject for discussion is the "Diagnosis and Treatment of Incipient Laryngeal Cancer," the discussion being opened on "the diagnosis" by H. W. Loeb and S. S. Bishop; on "the treatment" by Wm. Scheppegrell and George Knapp.

Papers will be read by: Drs. Thomas F. Rumbold, St. Louis, Mo.; Hamilton Stillson, Seattle, Wash.; M. A. Goldstein, St. Louis, Mo.; W. L. Dayton, Lincoln, Neb.; E. C. Ellett, Memphis, Tenn.; K. K. Wheelock, Fort Wayne, Ind.; S. S. Bishop, Chicago, Ill.; George Knapp, Vincennes, Ind.; Augustus McShane, New Orleans, La.; Wm. Scheppegrell, New Orleans, La.; D. Milton Greene, Grand Rapids, Mich.; W. L. Ballenger, Chicago; N. H. Pierce, Chicago; Hal Foster, Kansas City; W. T. Grove, Eureka, Kan.; Fayette C. Ewing, St. Louis, Mo.; Edwin Pynchon, Chicago.

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## **SOCIETY PROCEEDINGS.**

### **NEW YORK ACADEMY OF MEDICINE.**

#### **SECTION ON LARYNGOLOGY AND RHINOLOGY.**

Stated Meeting, November 23, 1898.

Jonathan Wright, M.D., Chairman.

#### **Recurrent Laryngeal Paralysis.**

Dr. C. G. Coakley reported a case of recurrent laryngeal paralysis with autopsy. The patient was a man, sixty-two years of age, who first came under observation of Dr. Oppenheimer last October, complaining of shortness of breath and aphonia. Examination showed paralysis of the left recurrent laryngeal nerve. Careful inspection of the chest failed to reveal any cause for this paralysis. At this time there was an extensive emphysema of both lungs. The apex beat of the heart was about two inches below the xiphoid cartilage. The speaker said that as the dyspnea was rapidly increasing the man had been advised to go to the hospital. He entered the Columbus Hospital on November 9, but died suddenly the same night. A few days before this dysphagia had developed. The autopsy revealed a tumor, which was situated directly behind the junction on the left clavicle with the sternum. This tumor had sloughed and had opened into the esophagus. The lungs appeared to be normal. The trachea was considerably pressed, and this accounted for the dyspnea. Examination of the growth showed it to be a carcinoma. The pathologist thought the growth occupied the lower part of the thyroid.

Dr. J. W. Gleitsmann said that he had presented to this academy a man with an enormous aneurism of the aorta and a recurrent paralysis. The history at the time was not complete, but the case was one of great interest. Subsequent search of the records of the German Hospital showed that he had seen this patient first in 1894. According to the records, the paralysis at that time was not one of the recurrent nerve, but an abductor paralysis. When pressure was first made on the nerve the abductor fibers were affected, but subsequently the whole nerve became so injured as to lose its function, and then the recurrent paralysis appeared.

Dr. R. C. Myles remarked that a very interesting feature of the specimen was the atrophy of the cord and of the muscles behind it from non-use.

Dr. Jonathan Wright said that the discussion of this subject had been recently reopened in one of the German journals. Two or three weeks ago he had seen a man of about sixty years who gave a history of increasing dyspnea for several months, and of a hacking, distressing cough for two years previously. During this time there had been occasional and sudden attacks of hoarseness lasting for a day or two. He was to all appearances a healthy man. There was no paralysis of the cord, but the right one did not move as promptly as did the other. Dr. Wright believed there was an aneurism of the innominate artery, which was pressing on one of the bronchi. The paralysis was just beginning and was intermittent. The speaker said that in many of these cases of growth in the chest one found an antecedent history of occasional attacks of hoarseness and of spasmodic dyspnea.

#### **The Abuse of the Electric Cautery in the Nose.**

Dr. H. Holbrook Curtis read a paper with this title. Two cases were reported in the paper to show what a distressing condition is sometimes left after cauterization of the nasal septum. For complete paper see *The Laryngoscope*, January, 1899, page 32.

Dr. Myles said that he had never seen much necessity for the use of the thermo-cautery on the cartilaginous septum. He had attempted once to control hemorrhage here by this means, but it had failed utterly, and he had not used it since for that purpose. The electric cautery he had used quite extensively on the tubercle of the nasal septum. A sharp and very delicate electric knife should be selected. In his own experience there had not been any serious effects from this practice. He never used the electric cautery along the inferior turbinal except with the greatest caution because of the danger of cerebral inflammation. The use of the electric cautery on decidedly hypertrophic tissue seemed to be far more effective than the use of acid. There should be little or no after-effect from the electric cautery, provided the adjacent tissues were not roasted. Most of the bad effects observed arose from the use of too large electrodes and from their improper application. About ten years ago when he was using the electric cautery quite extensively on the posterior tip of the inferior turbinal he had had two cases of acute otitis media as a result. Since that time he had used the electric cautery snare upon which strong traction had been made before the current was turned on.

Dr. Gleitsmann said that he used the galvano-cautery on the septum in the same manner as had been described by Dr. Myles. He had the records of a series of cases in which patients complained of spasmodic sneezing only, and in which he had arrested it in fully four out of six by cauterization of that portion of the septum opposite the middle turbinate. In doing this the septum was cocaineized thoroughly and the galvano-cautery point used, taking care not to touch the turbinate. He took every precaution to avoid the formation of adhesions. Regarding the application of the galvano-cautery to the inferior turbinate, he said that he applied the galvano-cautery regularly to hypertrophies of the inferior turbinate, and, after making a groove in this way, he made an application of trichloracetic acid. The patient was directed to use a spray of boric acid solution containing cocaine in the strength of one part to one thousand of the solution, and there were no unpleasant after-effects.

Dr. W. K. Simpson said that in speaking of cauterization of the turbinated tissue we were dealing with one of the most valuable methods of treating hypertrophy of the turbinates. Meningitis and similar inflammatory accidents might just as well follow cauterization with acids as with the galvano-cautery. If properly used, the galvano-cautery applied to the turbinated tissue seemed to him a most valuable method of treatment, but, like other methods, it must be employed with care, judgment and knowledge. No one would think of using it in the reduction of extensive deformities of the septum, but there were certainly conditions of the septum in which the galvano-cautery could be used with excellent results. He called attention to quite a common edematous condition of the nasal septum, situated rather high up, which proved to be a potent cause of sneezing in the various types of rhinitis. He had seen cures follow the destruction of this tissue by means of the galvano-cautery. Personally, he had never seen any untoward symptoms follow the use of this form of cauterization. He believed, with Dr. Myles, that the operator must clearly keep in view the exact object to be attained, and that only the finer points should be employed so that merely a deep groove is made.

Dr. Clarence C. Rice said that a word of warning might well be said against all methods of destroying the nasal tissues, but he would not agree with the reader of the paper regarding the use of the galvano-cautery. He used this form of cautery daily. Applied at a low red heat to a small spur on the septum it reduces the spur without exciting any inflammation. The galvano-cautery should

not be used at such a high heat as to scorch the opposite tissue. It takes the place of the saw and trephine in a great many instances. He deprecated the extensive use of the galvano-cautery on the cartilaginous septum because of the danger of devitalizing this tissue. The galvano-cautery was appropriate for the reduction of innumerable small hypertrophies, and did not cause the troublesome bleeding which follows the knife or saw. He did not use acids much on the turbinated tissues, but he did use the cautery to reduce the inferior turbinate. Just a small puncture here would produce a very satisfactory contraction, and give a much better result than he could obtain by the application of acids.

Dr. Wolf Freudenthal said that he did not employ the galvano-cautery very much, chiefly for two reasons. One of these was that he did not see as many hypertrophies now as formerly; the other was that some years ago when he was engaged in studying the quantity of moisture given up by the nose he had found that those noses which had been cauterized did not give off more than half the normal quantity of moisture.

Dr. Emil Mayer said that when we tear down we should always be ready to furnish something better, and he believed that we had something better than the galvano-cautery.

He alluded to the suggestions made at various times by Dr. Delavan. This consisted of a puncture of the mucous membrane of the turbinates with a needle knife and scraping the periosteum underneath. In addition to this method of treatment the introduction of the platinum needle and the use of a galvanic current of  $1\frac{1}{2}$  milliamperes was exceedingly valuable. He had come to regard the use of the galvano-cautery as being fraught with much danger, and would go so far as to say that it should never be used on the septum when other methods might be employed.

The statement has been made that the cautery is preferable because so much bleeding occurs with the saw or trephine. This is not the case if one makes use of the suprarenal extract before operating. This remedy makes the parts absolutely bloodless.

Dr. O. B. Douglas said that he had discarded the cautery absolutely because the results had not been satisfactory, and there were, in his opinion, better methods. In a paper read before this section ten or more years ago he had advocated the cautery, having been the first person to use the dynamo current for this purpose, but for the last three years he had not employed it at all.

Dr. M. D. Lederman said that the principal objection to the use of the cautery was evidently the destruction of the mucous mem-

brane. If this were the case, why not make the punctures submucoid? The disadvantage in the use of the galvano-cautery was the reaction; however, the method suggested by Dr. Gleitsmann seemed to him to do away with this in great part. The tendency, on looking into the nose and seeing a scab, was to attempt to remove the scab. If, on the other hand, the scab were allowed to remain for five or six days it would come away almost without assistance, and the wound would be found to have nearly healed underneath, even in cases in which a very large slough was left after the cauterization. Of course, in some cases there were idiosyncrasies, leading to excessive reaction.

Dr. J. E. Newcomb said that he thought the note of warning sounded by the reader of the paper was most timely, for it was not uncommon for patients to come in and ask to have the nose burned out, yet examination would show that this was just what was not required. After hearing Dr. Swain's paper last May, on the use of the suprarenal extract he had himself made use of the same. This preparation is neither antiseptic nor anesthetic, and must, of course, in operative work, be used in alternation with cocaine. Dr. James Ewing had recently expressed the opinion that protonuclein and similar bodies would probably be found to have the same effect on engorged tissues as the suprarenal extract. Personally, he had never used the cautery upon the septum. In cauterizing the turbinate bones he had followed practically the method mentioned by Dr. Gleitsmann. Deeper pressure should be made at the first and last parts of the application. He also insisted that the patient should wear a little tuft of antiseptic cotton in the nostril for a few days, especially when out of doors. Regarding the sensation which people have of not getting enough air through the nose, the speaker said that he believed that there was such a thing as subjective dyspnea—a sensation of lack of air without proportionate mechanical obstruction. This matter had been treated of in a paper by the chairman. In one case in which he had used the cautery there had been adhesions. He would like to hear regarding the comparative danger of adhesions from the use of the galvano-cautery and the application of chromic acid.

Dr. Wright said that he used the cautery without hesitation wherever he found vascular hypertrophy. He would not think it advisable to use it for destroying cartilage. Lately he had used it on the mucous membrane of the septum several times, and posteriorly high up where there were large vascular swellings. It could be done without any pain and with good result. So far as

he knew, the cautery had been used for a very long time for the destruction of vascular tissue, and probably would continue to be used for this purpose for a long time to come.

Dr. Curtis, in closing the discussion, said that an important fact to be borne in mind was that unless our attention were called to the possible danger of such practice we were apt to overlook it. When the patient returned long after the use of the thermo-cautery one was not apt to think that the dry rhinitis present was the result of this cauterization; moreover, it was not improbable that the patient would go to some other practitioner, and hence the physician's attention would not be directed to the serious effects that he had produced. Since he had been looking for and studying this dry scabby condition of the nose, he had found it almost invariably a sequela of such treatment. He saw no reason why the thermo-cautery should be dangerous in vascular tissue unless the meninges approximated the part so treated. There had certainly been enough fatalities from such treatment to justify physicians in being exceedingly cautious. Since last spring he had tried the suprarenal extract, and had found that the tissues were blanched and operations rendered almost bloodless. It was true that the turbinate bodies might be blanched by a great many things—even a pledget of cotton moistened with water—but such an action was ordinarily exceedingly evanescent. He was of the opinion that the inferior turbinate, especially posteriorly, was more scientifically treated by the injection with a syringe of monochloracetic acid. The making of a longitudinal burn and afterward filling it with acid did not seem to him at all necessary.

#### **Nasal Catarrh in Children : Its Cause and Treatment.**

Dr. Clarence C. Rice read this paper. He said that some writers lay much stress upon the influence of heredity, but it should be remembered in this connection that sickly and rachitic children who have adenoids come to the general practitioner, while the robust children are more apt to come to the rhinologist. It was convenient to divide the catarrhal conditions found in children into acute and chronic; and still further into simple catarrhal and purulent; and, again, into hypertrophic and atrophic. Many acute coryzas in children are simply symptomatic of pathological conditions in the nose or pharynx. He believed that in almost 80 per cent. of cases of chronic nasal discharge occurring in children the chief cause was the presence of some degree of enlargement of the post-nasal or pharyngeal tonsil, which might or might not be accompanied by



enlargement of the faucial tonsils. Only a very small amount of adenoid hypertrophy was necessary to produce chronic catarrh in young patients, because of the narrowness of the space. Purulent rhinitis in children, according to Dr. Bosworth, is a frequent disease, terminating eventually in atrophic rhinitis. The significant symptom, according to this same authority, was a bright yellow discharge of pus from both nostrils, but certainly in his own experience it was rare to meet with such a discharge. He believed the disease was really an atrophic rhinitis from the beginning, and that this affection could be recognized by the condition of the nasal passages. Acute bilateral empyema of the sinuses might be present for a short time after an acute coryza. All acute coryzas are also most amenable to treatment, and the purulent discharge usually ceases when all nasal obstruction has been removed and the passages have been cleansed. He did not recognize deviation of the septum unless the deformity was sufficient to interfere with nasal respiration. Chronic hypertrophic rhinitis, in his opinion, was a comparatively rare affection in children, because in very few persons under twelve years of age was there organized connective tissue hypertrophy of these structures. Many apparent hypertrophies are caused by interference with the nasal circulation and disappear as soon as the real cause of nasal respiration is removed. He had rarely found spurs on the nasal septum sufficiently prominent in children under twelve years of age to require treatment. Nasopharyngeal catarrh does not appear in children except as a symptom of the enlargement of the pharyngeal tonsil. Acute inflammations of the maxillary sinuses occurred more frequently than had been supposed, and were more commonly bilateral in children—the reverse of what it is in adults. Atrophic rhinitis was by no means an uncommon affection in children, being present in some degree in about 10 per cent. of children suffering from nasal disease over five or six years of age. In these cases the nostrils are too roomy and there is a tendency towards the formation of crusts from the diminished moisture. In the majority of instances there seemed to be from the very beginning a special predisposition to atrophy. The same conditions in one child might produce a hypertrophic process and in another an atrophic one. Atrophic rhinitis is much more commonly observed in the poorer classes than among the well-to-do. There are many cases of atrophic rhinitis which might be prevented or aborted by earlier attention. Ozena seemed to him only a name for a condition which might accompany many pathological states. If ozena were a special disease, always producing



characteristic pathological changes, it had not yet been clearly recognized. He believed enlargement of the pharyngeal tonsil was the most common cause of nasal catarrh in children. This adenoid enlargement is common to all classes of children, and is often the result of the acute coryzas accompanying the eruptive fevers. In most cases, if the adenoids were removed by early operation, the hypertrophic changes which seem to exist in the nostrils would disappear and the nasal passages would become normal. It was the imperative duty of the physician to remove enlarged pharyngeal tonsils. After the clearing of the passages the indications were to use simple, non-irritating disinfectant washes, followed by bland powders or oils.

Dr. A. Jacobi said that many infants suffer from nasal catarrh. Adenoids are rarely found in very young children, but nasal catarrh is common and severe. One reason for this great frequency was to be found in the anatomical conditions—the small space in the nose. The nasal cavity in the adult is about two-sevenths of the distance between the eyes, measured externally, whereas in the baby it is only two-ninths. The lower passage hardly exists in the baby, and the middle passage is very narrow, particularly in its anterior part. The septum is more horizontal in the newly born, more vertical in the adult. Accumulations of mucus in that neighborhood are not expelled, or washed out, and hence they give rise to irritation and nasal catarrh. The newly-born baby is desquamating over all of its integuments, both epidermis and mucous membranes; there is a rapid change of the epithelium into mucus. Nasal catarrh is not, as a rule, taken care of because the symptoms are not very urgent. The lymphatics in the baby are more numerous and are larger than in the adult, and hence any irritating material is absorbed very readily. One result of such absorption is, for instance, enlargement of the lymph bodies about the neck. Where there was naso-pharyngeal irritation, for example, the glands adjacent to and below the angle of the jaw swell, just as the lymph-nodes about the neck swell during eczema of the head, the submental because of inflammation of the floor of the mouth, or the inguinal because of an irritation about the external genital organs. According to the theory that adenoids must be scraped out at once, and that they are the primary cause of the irritation of the mucous membrane, these enlarged lymph-nodes should be cut out. But something much better could be done—the removal of the irritation which produced them—provided the lymph-nodes were not too old and had not become hyperplastic. The adenoids are

lymph-nodes, but contain much less connective tissue than the lymph-nodes just referred to. Just as the cleansing of the nose would remove the enlargement of the lymph-nodes externally, unless too old and hyperplastic, so the adenoids, if they had not existed too long, would be removed. He knew of even large adenoids becoming smaller under such treatment, although undoubtedly many adenoids require surgical removal. He wished to emphasize the fact that, in many cases, adenoids are not the cause, but the result of the nasal catarrh. The rhinitis was often the primary affection, and existed for years before the development of the adenoids. The latter are not common in children of two or three years of age, and common in children of eight or ten years. Even after surgical removal of the adenoids, attention must be given to the persistent and proper cleansing of the nasal passages. It was his rule to insist upon having babies' noses irrigated once daily with warm salt water, even in the entire absence of symptoms of nasal catarrh. The nose should be washed on the inside just as regularly as it is on the outside. Another reason for insisting upon this cleansing process was that the little ones are constantly putting their soiled fingers and all sorts of foreign bodies into the nostril. That is why all sorts of pathogenous and non-pathogenous microbes are found in the healthy as in the diseased nares. Dangers will arise from the presence of these microbes as soon as the mucous membrane is sore, the epithelium thrown off or injured, and absorption either of microbes or their toxins becomes possible. Here is the connection with all sorts of meningitis. It was very exceptional for children over ten years of age to have meningitis; on the other hand, the various forms of meningitis were most frequent between two and five years of age, or just at that period when the child was crawling around the floor and most apt to introduce all sorts of germs into the nasal passages.

Dr. Henry D. Chapin said that in older children he had found marked adenoid hypertrophy at the vault of the pharynx, and for the reasons mentioned by the last speaker. In children of four or five years, with more or less persistent nasal catarrh, he had found marked hypertrophy of the adenoid tissue almost without exception, and irrigation did not seem to be adequate to cure the condition. Sometimes a small amount of hypertrophy would cause great disturbance, so that these children would be constantly developing acute coryza. It was his practice to prescribe for these children irrigations with albolene, and if this were not sufficient, he scraped away the adenoid growth. When there was slight hypertrophy at

the vault of the pharynx there would often be a persistent and most troublesome cough at night. The ring of adenoid tissue around the opening of the food passage was very marked in children, and was possibly put there by nature as a safeguard against the introduction into the system of noxious germs with the food.

Dr. J. H. Fruitnight said that the treatment of nasal catarrh should be instituted long before the development of the adenoids. He had also made it a practice to advise that the nasal passages of little children should be subjected to a daily toilet. If the nasal passages were kept clear in this manner, Dr. Caillé had shown that the liability to diphtheritic infection would be diminished. Constitutional conditions certainly aggravate and predispose to nasal catarrh. He doubted if there had ever existed a case of rachitis in which a catarrh had not existed at some time or other. The same remark was applicable to cases of tubercular or syphilitic infection.

Dr. Walter Lester Carr said that it was difficult to obtain exact statistics in a condition so common as nasal catarrh, and for the reasons suggested in the paper. The general constitutional condition of the patient should not be overlooked in the treatment even though it might not be regarded as the chief etiological factor. In all of the eruptive diseases care should be taken that the nasal passages are kept clean, and it should be borne in mind that the mucous membranes are very prone to congestion in childhood, especially if the skin is not active. In a case of catarrh, whether acute or chronic, it was wise to examine for enlarged adenoids. He had rarely met with the purulent rhinitis described by Dr. Bosworth, and one such case he had seen had proved exceedingly obstinate to treatment, yielding only to the internal use of creasote.

Dr. O. B. Douglas said that he wished the author of the paper had laid more emphasis on the far-reaching results of the common neglect of nasal catarrh in children, and also regarding the care necessary in making the proper irrigations. The irrigations should be made with normal salt solution which has been sterilized by boiling. It seemed to him that a very large percentage of catarrhal troubles of adult life are but the inheritance of childhood.

Dr. W. K. Simpson expressed his thanks to Dr. Jacobi for his lucid description of the mode in which nasal catarrh originates in infants and how it gains a foothold. While undoubtedly the causes to which he referred do exist, there is a chronic condition which confronts the rhinologist—a stage in which the adenoids and the nasal spurs and the enlarged tonsils, which are the result of the first nasal catarrh, become, in effect, the cause of the continu-

ance of the catarrh. If in the various exanthemata the nasal passages are properly treated there is not likely to be any subsequent nasal catarrh as a result of these diseases. He was one of those who believe that the period of dentition is exceedingly liable to be followed by the development of nasal catarrh. He looked upon dentition as one of the critical periods of life. Bad hygiene was perhaps the most common cause of nasal catarrh. Constipation was another frequent cause. He did not believe that atrophic rhinitis in children followed hypertrophic rhinitis as commonly as some writers seem to think, if only for the reason that hypertrophic rhinitis being so common, it could not possibly pass into the atrophic form without being more frequently observed. He was of the opinion that the nose could be washed out perfectly without much danger of causing inflammation of the ear. In older children the spraying of the parts with a very weak solution of cocaine prior to the irrigation would prevent the irritation which always follows the use of any solution, no matter how bland.

Dr. Wendell C. Phillips said that the nasal catarrh in children did not differ from that found in adults except in degree. It would be found almost invariably that one or both parents, of children having adenoids, have also suffered from the same condition, so that at least there seemed to be an inherited tendency. Much could be done in his opinion in the way of prevention of catarrh in children by educating them to become accustomed to sudden changes in the weather—they should be taught to “rough it” and not be coddled. He believed, with the reader of the paper, that naso-pharyngeal adenoids are much more common than enlargement of the faucial tonsils. He was not yet prepared to accept the statement that adenoids were caused by the catarrhs of young children, and very gravely doubted if the theory would hold true. The statement was often made, that adenoids are not seen in children until the eighth or tenth year, but this was not true; adenoid development was observed even in young infants. He had himself removed a considerable portion of adenoid tissue in a baby of four months because of a purulent discharge from the ear. This had effected a complete cure of the ear disease without further treatment.

Dr. Chapin said that he must dissent from the use of cocaine, even in weak solution, because these little ones are especially susceptible to poisoning by this drug.

Dr. A. Jacobi said that he had not intended to say that every adenoid must be the result of nasal catarrh. He had also seen adenoids in very young infants, and had removed them.

Dr. Wright said that at the autopsy table he had seen quite marked congenital adenoids. In all of the cases of adenoids that he had examined he had also found a marked apparent hypertrophy of the post-nasal tissue.

Dr. Rice, in closing the discussion, said that although acute nasal catarrhs in very young babies might produce adenoids, nevertheless the persistence of this growth was a very prevalent cause of *chronic* catarrh. He was glad to see such general agreement as to the great prevalence of adenoids. He thought irrigation in cases of adenoids was dangerous because it was liable to excite inflammation of the ear, and was rarely efficacious in cleansing the passages until the enlarged naso-pharyngeal tonsil had been removed.

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**Notes on an Outbreak of Diphtheria in a Country District—**

W. E. STEVENS—*Australasian Med. Gazette*, Vol. xvii, No. 10, Oct. 20, 1898.

The causes of the outbreak in one neighborhood were an old sheep dip, which had not been cleaned out, a woodshed with the accumulation of droppings from several thousand sheep and a privy. In another, a town, the cause was bad drainage. Eighteen cases were treated with serum, all recovered. Of six cases treated without injection, one died before seen; the remainder recovered very slowly, being ill three times as long as those treated with serum.

EATON.

**The Treatment of Whooping Cough by the Inhalation of Medicated Oxygen—**LACROIX—*Gazette Hebd. de Méd. et de Chir.*, October, 1898.

This method modifies the attacks of cough, diminishing them both in number and intensity. It obviates complications, such as broncho-pneumonia, hernia, prolapse of the rectum, epistaxis, vomiting, etc. It strengthens the organism, relieving the general condition and placing the organism in good form to resist the invasion of infectious diseases so frequent after whooping cough.

SCHEPPEGRELL.

## ABSTRACTS AND BIBLIOGRAPHY.

### I. NOSE.

**A Case of Nasal Fibroma**—W. E. CASSELBERRY—*N. Y. Med. Journ.*, November 5, 1898.

Eleven years ago the author removed by repeated sittings, by means of the electro-cautery steel-wire snare, a tumor which occupied the whole left nostril. The primary attachment extended along the horizontal plate of the ethmoidal bone, and included that part of the ethmoid which contains the cells and from which project the middle turbinated bone. The latter had disappeared by absorption, and the cells opened by the same process into the general nasal cavities. Since the operation the patient has been without recurrence. A microscopic examination proved it to be a fibroma.

The article concludes with an interesting résumé of the subject.  
SCHEPPEGRELL.

**Deafness and Nasal Disease**—Editorial *Kansas Med. Jour.*, Vol. x, No. 45, Nov. 5, 1898.

A review of the present opinions in vogue.

EATON.

### II. MOUTH AND NASO-PHARYNX.

**Report of a Death immediately following an Operation for Naso-Pharyngeal Adenoids under Chloroform**—F. W. HINKEL—*New York Med. Jour.*, October 29, 1898.

A boy of six years was operated on for naso-pharyngeal adenoids, chloroform being used as an anesthetic. A very slight cardiac systolic murmur, loudest at the base, was noticed, but it was not considered due to an organic lesion, its presence being not uncommon in debilitated children. There was much delay from the vomiting of undigested food which had been taken by the patient at a light breakfast nearly five or six hours before. Respiration was interrupted a number of times by spasms of the glottis, partial recovery from the anesthesia occurred and quite a length of time elapsed before the patient was sufficiently relaxed for the operation. About a fluid ounce of chloroform was administered in all. Near the end of the operation the patient suddenly gave a few hurried shallow gasps and respiration ceased. The pulse disappeared and no cardiac pulse could be felt or heard; the pupils were dilated. All efforts of resuscitation failed. No post-mortem was obtained.



The author has collated eighteen cases of death from chloroform narcosis for the removal of naso-pharyngeal adenoids, hypertrophied tonsils, or both.

Paltauf, Kolisko and others have thrown some light upon the cause of the extraordinary mortality under chloroform in this operation. It has been found, post-mortem, in a number of cases of sudden death from slight causes, that there was present hypertrophy of the lymphoid tissue throughout the body, including the tonsils, the lymphoid structures at the root of the tongue, and of the naso-pharyngeal adenoids; the thymus gland was persistent and often very large, and the intestinal follicles were markedly hypertrophied. In addition, there were frequently present a debilitated heart not dependent upon valvular lesions, and at times a narrowing of the aorta with small size of the peripheral vessels. This condition, which has been called *habitus lymphaticus*, was found among others in a number of cases of death during chloroform administration. People so constituted, even though apparently robust, seem to have little power of resistance to comparatively slight shocks.

In commenting on Kolisko's report, Brickner states that it would therefore seem that in anesthetizing patients of lymphatic temperament, or in whom lymphatic enlargements or adenoid vegetations existed, chloroform should be rigidly excluded. Dr. Hinkel offers the following conclusions:

1. Statistics show an exceptionally high mortality from chloroform anesthesia in the operation for the removal of lymphoid hypertrophies of the pharynx.
2. The observations of Viennese pathologists show that sufferers from adenoids frequently belong to an abnormal constitutional type that has been found peculiarly susceptible to chloroform narcosis.
3. In view of the statistical and pathologic data presented, the general use of chloroform in the operation for hypertrophied tonsils or naso-pharyngeal adenoids is inadmissible. SCHEPPEGRELL.

**Pharyngeal Mycosis**—PRICE BROWN—*Canadian Medical Review*, Vol. vii., No. 4.

In a paper read before the Toronto Medical Society Dr. Price Brown states that he has seen four cases—two were men, aged fifty and thirty years, the other two were women, aged forty and nineteen years. One had suffered from disease of the maxillary antrum, the year previous, but had been cured. The following winter he had been employed in polishing cows horns, the odor of which had been very strong, and after a few weeks his throat commenced to get sore. The suggestion is made that the leptothrix spores were inhaled in the powder from these horns.

A condition of impaired health would appear to be required in order to secure the attachment and growth of the fungus in the pharynx. The author advocates the use of the galvano-cautery as the only method of treatment attended by good results.

GIBB WISHART.



**Notes of a Case of Epithelioma of the Pharynx, with Microscopic Specimen**—CECIL E. SHAW, M.A., M.D. (Belfast)—*British Med. Jour.*, October 22, 1898.

Mrs. P., aged thirty, was first seen in May, 1897, on account of difficulty in swallowing, and feeling a lump in her throat.

Ten weeks before the throat began to feel sore, and three weeks before her voice got hoarse, and swallowing became difficult. At no time was there any pain, merely an uncomfortable feeling of something in the throat. She had not lost flesh. On examination the pharynx was seen to be dry and dirty, and with the laryngeal mirror a swelling about the size of a nut was seen in the posterior wall of the pharynx, directly behind the epiglottis, which it touched, and where it touched the top of the swelling was ulcerated. Nothing could be felt outside. A small piece of the edge of the ulcer nipped off with Schrötter's forceps, and examined, proved to be a typical specimen of a reticular epithelioma.

On July 2d she was delivered of a child, which lived three days, and on July 9th she became comatose and died in a few hours.

WATSON WILLIAMS.

**Removal of Foreign Body from the Cheek**—J. M. ELDER—*Montreal Medical Journal*, Vol. xxvii, No. 1.

The patient, aged 24, presented a fluctuating tumor high up under the zygoma, at the anterior border of the masseter muscle. A steel pen was removed, the foreign body had been in the cheek for seventeen years.

GIBB WISHART.

**Report of a Case of Acute Uvulitis**—HAL FOSTER—*Western Med. Jour.*, Vol. x, No. 10, October, 1898.

A farmer, aged fifty-four, in good health, took a severe cold for which he drank some very hot coffee. He noticed at the time that the throat pained. Several hours later the pain became very severe in the region of the palate, increased, and the voice was lost. On examination the uvula was found to be enormously swollen, elongated, causing constant cough, and there was some suffocation as the tonsils and arches were concealed by the greatly distended uvula. The aphonia was hysterical. After applying a 20 per cent solution of eucaine, a small portion of the uvula was removed by the galvano-cautery snare. The aphonia soon disappeared and he was soon able to talk as usual.

EATON.

**The Occurrence of Cartilaginous and Bony Nodules in the Tonsil**—HUGH WALSHAM—*Lancet*, Aug. 13, 1898.

In the course of other researches on the tonsil, the author came across scattered masses of cartilage in certain cases, and in others small masses of bone, in the form of trabeculae, rings, and solid nodules. At first he thought that he had to do with an enchondroma of the tonsil—a rare condition, but one that has been described. But, on thinking over the matter, he came to the conclusion that this

supposition was untenable, as the cartilage and bone trabeculae occurred on both sides. On reflection, it appeared that there was a close analogy between these cartilaginous masses in the tonsils and those small cartilaginous growths which develop in the lines of the branchial clefts, and which are found in the neighborhood of the ear or lower down in the neck, sometimes only on one side, but more rarely symmetrically placed on both, or enclosed in the so-called branchial cysts, and also to the masses of cartilage that are found in the parotid gland.

The tonsil, according to Prof. His,\* is developed very early in intra-uterine life—about the fourth month—by a simple folding in of the mucous membrane at a spot situated between the second and third branchial arches, and the remains of which are visible in the adult tonsil as a fold—the *plica triangularis*. As development proceeds, this primary infolding of the mucous membrane or primary crypt splits up at its base into numerous secondary crypts; and, by the swelling of the meso-blastic tissue lining the invagination, and by the early appearance of lymphoid follicles, the rudimentary tonsil is formed. Remembering, then, the position in which the tonsil is developed, the author thinks we may assume that these cartilaginous nodules are of fetal origin—that is, they are cartilaginous rests derived from the second branchial arch.

In the author's opinion there can be no doubt that the enchondromata that have been described as occurring in the tonsil must have their origin in these cartilaginous rests, which, from some unexplained reason, begin to grow and proliferate. Clinically, it is important to remember that this condition may occur in the tonsil as a congenital peculiarity. The bony trabeculae, it will be observed, were principally found in persons of advanced age; and, at first, one would be disposed to look upon the presence of bone as a mere senile change; but it was also found to a less extent in the younger persons. It is probable that these centers of ossification may be present from the first, as a small amount of bony material was found in the tonsils of a child, aged two years, observed by Prof. Roth.

Prof. Kanthack, to whom were shown the microscopical specimens, dissents altogether from the above theory. His view is that in these cases there is no embryonic inclusion, but merely a metaplasia of fibrous tissue into bone or cartilage.

There are references to other cases in literature; and the article is illustrated by three sections. STCLAIR THOMSON.

\*"Anatomie der Menschlichen Embryonen, dritte Partie," p. 82.

### III. ACCESSORY SINUSES.

**Catarrh of the Antrum of Highmore**—H. I. JONES—*Pacific Medical and Dental Gazette*, July, 1898.

The majority of cases reported here had been 'due to external injury or disease of the teeth. EATON.

**Empyema of the Maxillary Antrum**—VANSANT—*Phila. Polyclinic*, Nov. 12, 1898.

The author employs the operation of perforating the internal wall, through the inferior meatus of the nose, and introduces a small silver drainage tube, through which antiseptic solutions are syringed, and also escape by the same exit.

LEDERMAN.

**Some New Features of the Accessory Cavities of the Nose**—

ROBERT H. CRAIG—*Lancet*, Aug. 20, 1898.

These notes are worthy of perusal, but they do not lend themselves to abstracting. They represent some of the anatomo-pathological teachings on the subject in the Vienna school.

STCLAIR THOMSON.

#### IV. LARYNX AND TRACHEA.

**Duplicated Vocal Cords**—R. FORUS—*Oto-Rhino-Laryngologia Espanola*, September, 1898.

A laryngoscopic examination showed a false glottis consisting of a pair of bands of a pale rosy color in the subglottic region, which were united like a fork at the anterior commissure and resembled the true vocal cords. There was no evidence from which to conclude whether the phenomena was congenital or acquired.

SCHEPPEGRELL.

**Membranous Tracheitis and Laryngitis without the Presence of Diphtheritic Bacilli**—L. A. GRIMES—*Lancet*, Aug. 13, 1898.

A boy, aged four years and nine months, who was recovering from an attack of measles, was admitted on May 18th, 1898, with marked stridor and great sucking in of the episternal notch and of the lower thorax during inspiration. On examination nothing abnormal was found beyond slight injection of the tonsils. The symptoms becoming rapidly worse and the child being in great distress, tracheotomy was performed within half an hour of admission. Immediately the tube was inserted a large piece of membrane was coughed up. This membrane was of a grayish-yellow color, and very tough. Dr. Ewart's method of introducing creasoted oil (one in twenty) into the trachea was at once adopted. Five minims every two hours had the effect of softening the membrane, thus enabling the child to cough it up more easily, and a fit of coughing was usually brought on immediately the oil reached the trachea. After twenty-four hours the dose was altered to ten minims every four hours. In two days the membrane became quite soft and muco-purulent looking. Bacteriological examinations were made by Dr. Slater on the first day and on three other occasions, but, though there were numerous bacilli, that of diphtheria was always absent. The membrane became gradually less from day to day, and the tube was finally removed on the twelfth day. The child made an uninterrupted recovery, and was discharged within the month.

STCLAIR THOMSON.

**Laryngectomy**—JAMES BELL—*Montreal Medical Journal*, Vol. xxvii, No. 5.

The larynx was removed for epithelioma from a patient aged sixty-five. First symptom, soreness, noticed in September, 1897. The voice became husky in November, and in January, 1898, a warty growth was seen and removed. Preliminary low tracheotomy was performed on February 7, and the removal of the whole larynx, including the epiglottis and cricoid, effected on the 16th of February. Hahn's canula was used, and replaced by a silver tracheotomy tube the following day. The stump of the trachea was drawn well forward and attached to the skin all around—the transverse incision sutured except at either end, through which the pharyngeal portion of the wound was packed with iodoform gauze. A large rubber catheter was fixed in the esophagus by suture, through which the patient was fed for 48 hours, after which it was removed, and the feeding effected easily by a stomach tube introduced by the mouth. Recovery ensued, the only complication being iodoform toxication, evidenced by delirium and pruritus.

The larynx exhibited a roughened nodular ulcerated surface with undermined edges—at the root of the epiglottis—both ventricular bands were involved by lateral extension, the right completely ulcerated through at its center, exposing the ventricle and saccule. The right vocal cord showed loss of epithelium. There was no glandular involvement.

GIBB WISHART.

**Extirpation of the Larynx and Esophagus**—GARRÉ—*Münch. Med. Woch.*, May 3, 1898.

The author reports three noteworthy cases. Case 1 occurred in a man, aged 43. The whole larynx was extirpated for malignant disease. The trachea was divided through the first ring, and the larynx was separated from the esophagus. The esophageal wall was left up to the arytenoid cartilages. The hyo-thyroid membrane was divided through, the epiglottis being taken away. The patient made a good recovery, and was free from recurrence two years later. Case 2 was that of a woman, aged 49. Here the larynx and a large piece of the esophagus were removed. The carcinoma started in the gullet and spread into the larynx. The diagnosis was only made possible by a laryngofissure. The patient was free from recurrence four months afterward. Garré referring to the statistics of laryngectomy, says that the improved technique has considerably reduced the death-rate. Death has usually resulted from broncho-pneumonia. This is to be avoided by a careful protection of the trachea and the shutting off of the lumen from possible contamination by secretions. This can be effected by Trendelenburg's tampon cannula or by Hahn's cannula surrounded by a sponge. Prevention of the broncho-pneumonia is also assisted by the closure of the pharynx by suture or a plastic operation. The position of the patient is most important—a horizontal position with inclination of the head backwards allows of the secretions draining away from the trachea.

By attention to these points, the mortality has fallen to 20 per cent. The author appears to think that a splitting open of the larynx is often necessary to the correct and early diagnosis of carcinoma laryngis. Finally, Garré relates a third case with resection of 5 cm. of the esophagus and excision of the larynx and upper five rings of the trachea. He closed in the great defect in the esophagus by means of healthy mucous membrane dissected off the trachea. Somewhat curiously, this mucous membrane did not prove sensitive to the contact of food. When a total transverse division of the esophagus has to be made, the plastic operation becomes more difficult, and various devices have been had recourse to. Garré's patient recovered well from the operation, but unfortunately an early recurrence took place in the glands.

STCLAIR THOMSON.

## V. EAR.

**Epithelioma of the External Ear**—F. N. G. STARR—*Canadian Jour. of Med. and Surg.*, Vol. iv, No. 1.

F. N. G. Starr describes the following three cases:

The first, a male, aged fifty-eight. A small pimple appeared ten months ago, which became larger and thicker and in a few months had a raw surface. When seen, nearly a third of the middle of the edge of the helix was involved, the mass extending across the antihelix down into the bottom of the concha. The surface was vascular, ulcerating externally and presenting somewhat everted edges. There was no pain. This was operated upon by a V-shaped incision, carried well down into the bottom of the concha. The continuous horse hair suture was used to bring the thin edges together. There was no sign of recurrence at the end of twelve months.

The second was a male, aged eighty-two. The growth affected the base of the lobule, extending into the bottom of the antihelix and involving the antihagus. There was no pain. The growth was removed, and the lobule sutured to the remaining part of the pinna. Good recovery.

The third was also a male, aged eighty-four. The growth presented at the meatus, about the size of a pigeon's egg, cauliflower-like and fungating. Its apparent origin was in the concha. Pain and tenderness were marked. Operation was refused.

GIBB WISHART.

**A Phantom Foreign Body in the Middle Ear**—HAROLD GIFFORD—*Western Med. Review*, Vol. iii, No. 10, Oct. 15, 1898.

A boy of three years was brought to the author with the lining of the left auditory meatus lacerated and so swollen that only a glimpse of the bottom of the canal was possible, and with a profuse fetid discharge. The story was that about a week before he

had put two glass beads into his ear. It was thought best to try to improve the condition of the meatus before doing the more radical operation from behind, and it was cleaned with boracic acid and hydrogen peroxide several times a day. A sister then stated that none of the family knew for certain that two beads had been put into the ear, but that the family doctor had removed one after a good many efforts and then said he felt another, but could not remove it. Though doubting the presence of a foreign body, as the boy's temperature increased to  $101^{\circ}$ , it was deemed best on the third day to do a radical operation, the pinna and cartilaginous canal being cut loose posteriorly. The drum-head was found to be mostly destroyed, and the most careful examination with the eye and probe discovered no foreign body, the smooth surface which had felt like glass at the first examination, was found to be the denuded promontory. Later the discharge ceased. The mother now volunteered the information that there had never been any bead in the case at all, but that the foreign body actually removed was a small flat stone from a ring, set with several such and that only one of these was missing from the setting.

Gifford believes that the doctor in removing the stone, probably denuded the bone and then mistook the smooth, hard surface thus exposed for another foreign body, and publishes the case as an instructive warning.

EATON.

**Systemic Infection from Middle Ear Disease**—S. E. ALLEN—*Cincinnati Lancet Clinic*, Oct. 29, 1898.

The case cited is of interest, as demonstrating a way in which general trouble may arise from a focus of infection within the middle ear, and making the necessary tuning-fork tests, the writer concluded that the infection must have been transmitted by the veins of the middle ear to the general circulation.

MACLEAN. (BISHOP.)

**Polyp in Shrapnell's Region of remarkably rapid Evolution**—RIPAULT—*New England Med. Monthly*, Nov. 1898.

This new formation occurred in a syphilitic subject, 35 years of age. He had a purulent discharge from the right ear; the perforation being above the short process of the malleus. A month later he complained of deafness, pain and the sensation of having a hard body within the canal. The snare removed an enormous polyp. Mercury and cleansing led to a cure.

LEDERMAN.

**Mechanical Vibration Applied to the Spine in the Treatment of Sclerosis of the Middle Ear**—DUNDAS GRANT, M.D., F.R.C.S., London.

In a number of cases of chronic catarrh of the middle ear of the class known as the sclerotic, Dundas Grant has made use of mechanical vibration applied to the spine as a method of treatment. He



was led to try this method on the suggestion of his wife, who had observed that certain of her friends who were affected with deafness and who heard better in the midst of a noise, heard also better when riding on bicycles. Under these circumstances the improvement was attributable to mechanical and not to acoustic vibration, and the method described is a means of supplying vibration of the former kind. He uses a small motor, on the axle of which was fixed a disc of brass in an eccentric position. On one side of the motor was attached a flattened curved band of metal, similar to a hand blotter, and on the other a handle like that of a teapot. The instrument is set in action by means of an electric current, and is then applied to the patient's spine, between the shoulders, for about five minutes at a sitting. It should be felt in the head and ears, but should be held as low down as compatible with this effect, so that the acoustic stimulation may be as slight as possible. The patient can usually realize after one application whether benefit has accrued or not. As a rule he applies it daily for a week, and then diminishes the frequency to the minimum necessary to maintain the effect.

The cases described were characterized by tuning-fork evidence of catarrh of the middle ear, were usually gradual in onset, free from any considerable narrowing of the Eustachian tube, and unbefitted to any marked degree by inflation and other tubal treatment.

These cases show varying results, but when we remember the hopeless prognosis in the disease, the effect of the treatment seems to amply justify its further employment. It is possible that it may be beneficial in post-suppurative fixation of the stapes, but Grant has not yet tried it in such cases.

How much of the effect is due to an indirect massage of the stapedio-vestibular joint he is unable to state, but he believes this is its true mode of action. The remarkable sense of well-being which patients experience after its use would suggest that it may also have some effect as a nerve tonic. In any event the enormous improvement produced in three, and the more moderate improvement in other three of the ten hopeless cases described must commend the treatment to all those who have been baffled by such cases; in fact, to all aurists of any considerable experience.

WATSON WILLIAMS.

**Ménière's Disease**—F. G. FINLEY—*Montreal Med. Jour.*, Vol. xxvii, No. 3.

Dr. F. G. Finley exhibited before the Montreal Medico Chirurgical Society a man presenting the "four cardinal symptoms of Ménière's Disease, viz., vertigo with vomiting, noises in the ears and defective bone conduction." The bone conduction was examined with tuning forks of various pitch. The two pitched notes brought out no variation from the normal, whereas with the high notes, the conduction was very defective. Dr. Finley was of opinion that "gastric disturbance undoubtedly increases the frequency and often precipitates the attack."

GIBB WISHART.



## VI. DIPHTHERIA, THYROID GLAND, ESOPHAGUS, ETC.

**Diphtheria and its Logical Treatment**—A. M. OSNESS—*The Med. Herald*, Vol. xvii, No. 11, November, 1898.

This paper is an arraignment of the theory that bacteria are "causative factors of disease," and its author regards diphtheria as an infectious process—"a locus of greater vulnerability in the system." He advocates, as preferable to antitoxin, the introduction of chemical agents that are carried by the blood stream to the affected part where they neutralize or antagonize the toxin. He has used with good result the monosulphide of calcium in three-fourth grain doses every half hour for a period of thirty-six hours.

EATON.

**Diphtheria: Some Observations on its Contagiousness and Treatment**—J. K. PEEK—*Richmond Journ. of Practice*, October, 1898.

A review of the diagnosis, symptoms and treatment. Antitoxin is recommended in all stages.

SCHEPPEGRELL.

## VII. INSTRUMENTS AND THERAPY.

**Citric Acid in the Prophylaxis of Whooping Cough**—M. FILHO—*The Southern Clinic*, November, 1898, *The Therapist*.

The author states that the special bacillus of pertussis is destroyed in its chosen home, the larynx, by swabbing the periglottic region with a 10 per cent solution of citric acid with simple syrup. It also constitutes an effective prophylaxis against infection. He succeeded in preventing the disease in many children living with others infected, by this means, or by merely the administration of small quantities of citric lemonade during the day. He considers resorcin and asaprol the most effective of other remedies.

SCHEPPEGRELL.

**Vapor Massage in the Treatment of Respiratory and Aural Affections**—H. M. DUNLAP, Battle Creek—*The Physician and Surgeon*, Oct. 1898.

Dunlap recommends vapor massage in diseases of the middle ear and respiratory tract—says that the same effect may be produced in these localities by this form of massage as that produced in other parts of the body by manual massage—that it follows the same indication, as the circulation is always involved in these diseases. This form of treatment may be carried out by means of a medicator attached to a compressed air apparatus.

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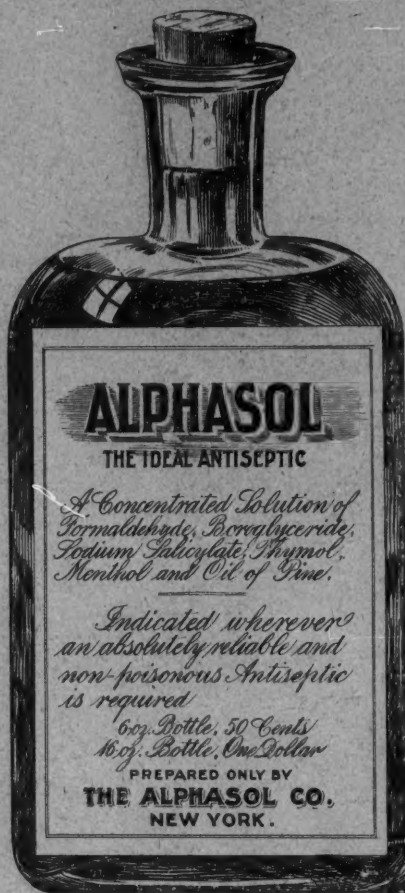
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